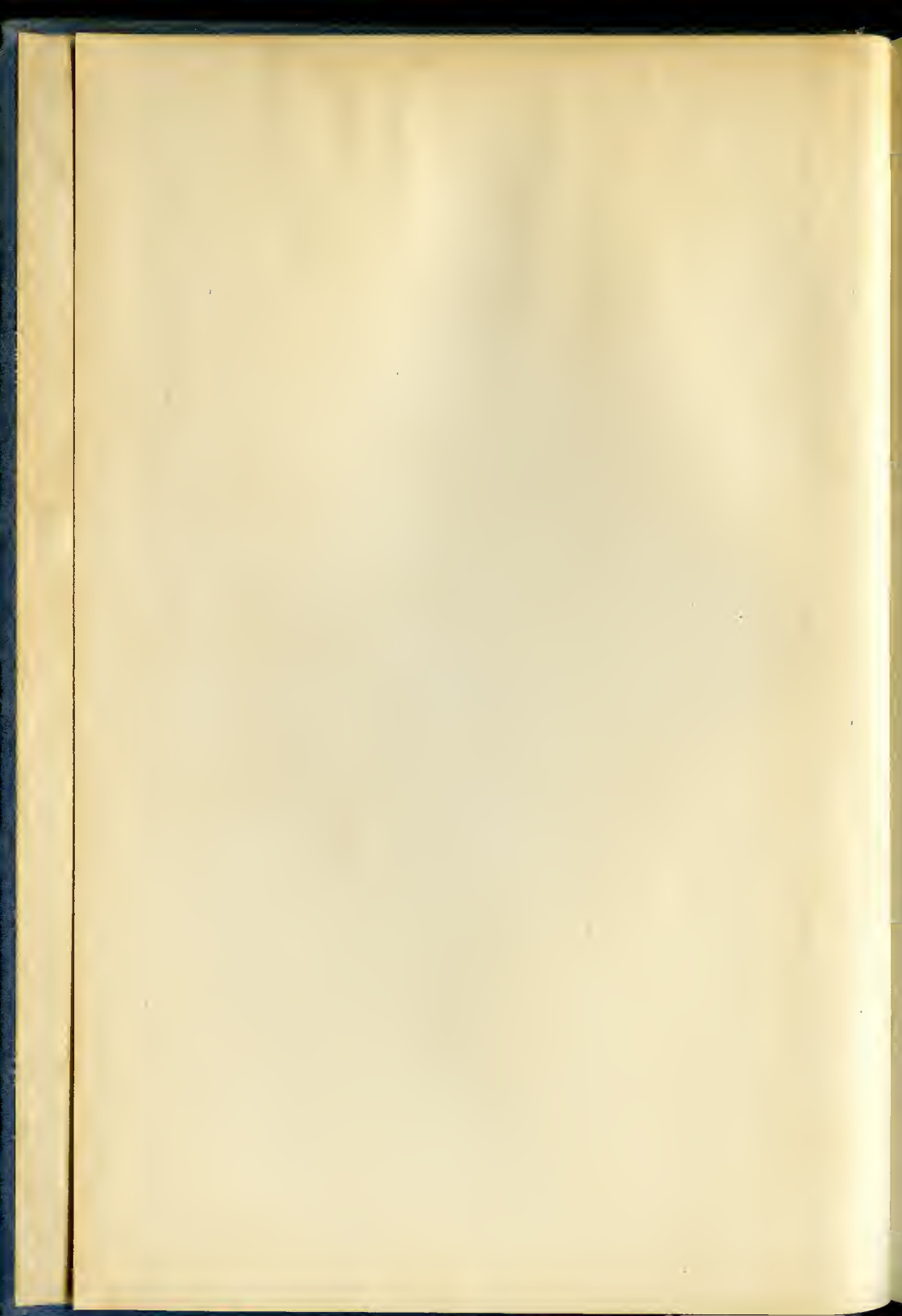


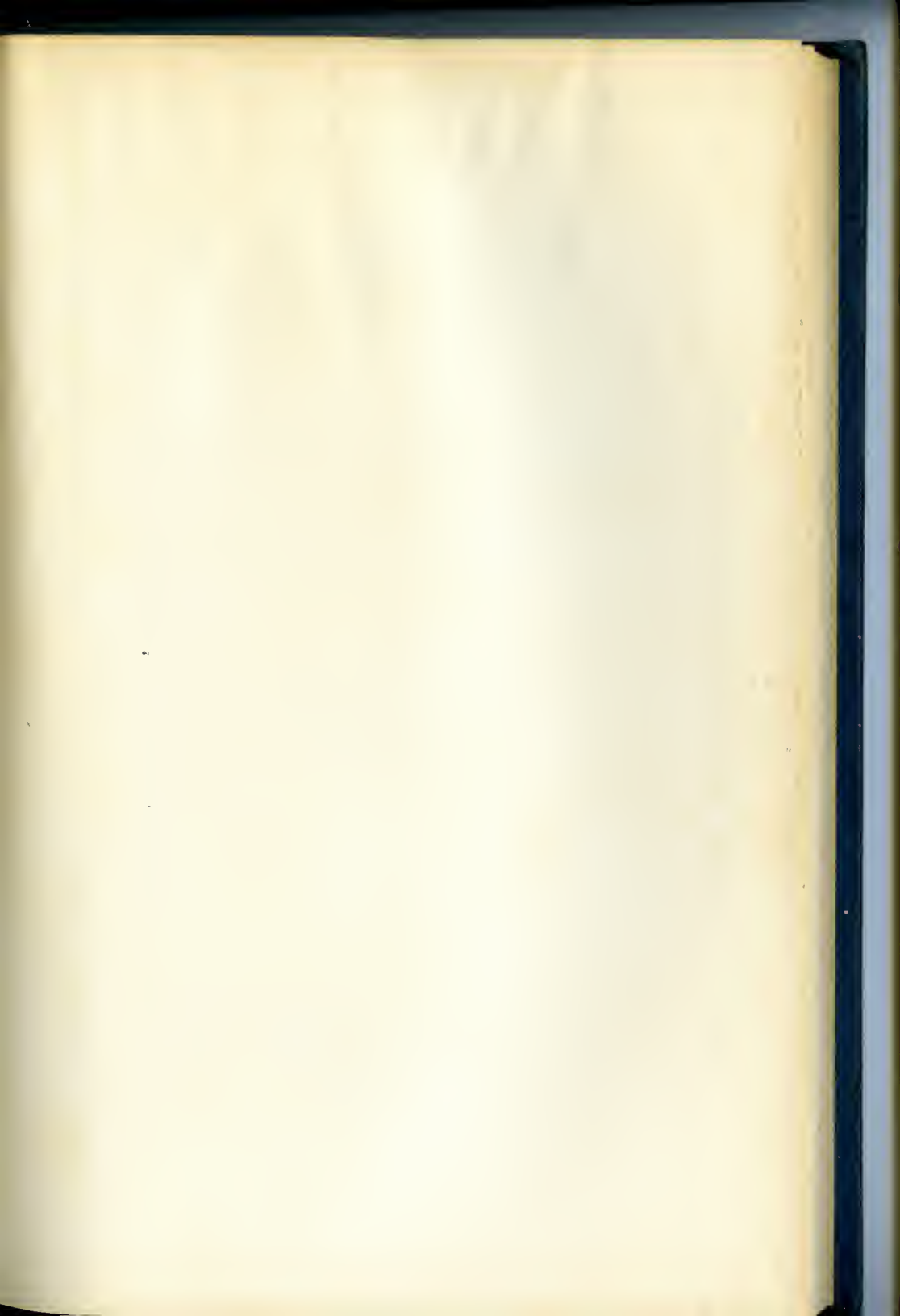
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IN SCHOLARSHIP

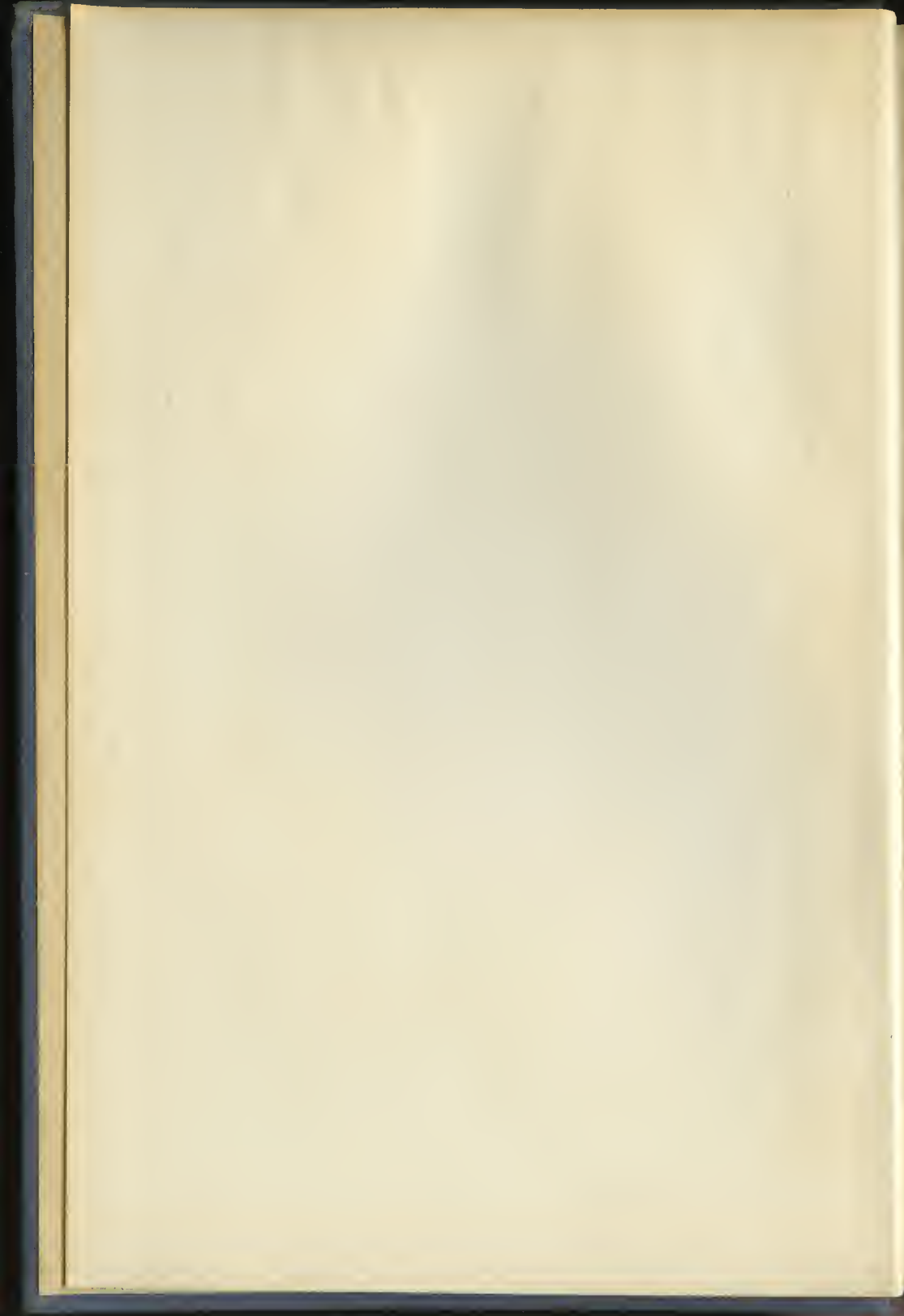
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THE AMATEUR SPIRIT
IN SCHOLARSHIP

THE REPORT OF
THE COMMITTEE ON PRIVATE RESEARCH
OF
WESTERN RESERVE UNIVERSITY

by
WILLIAM S. DIX
DIRECTOR

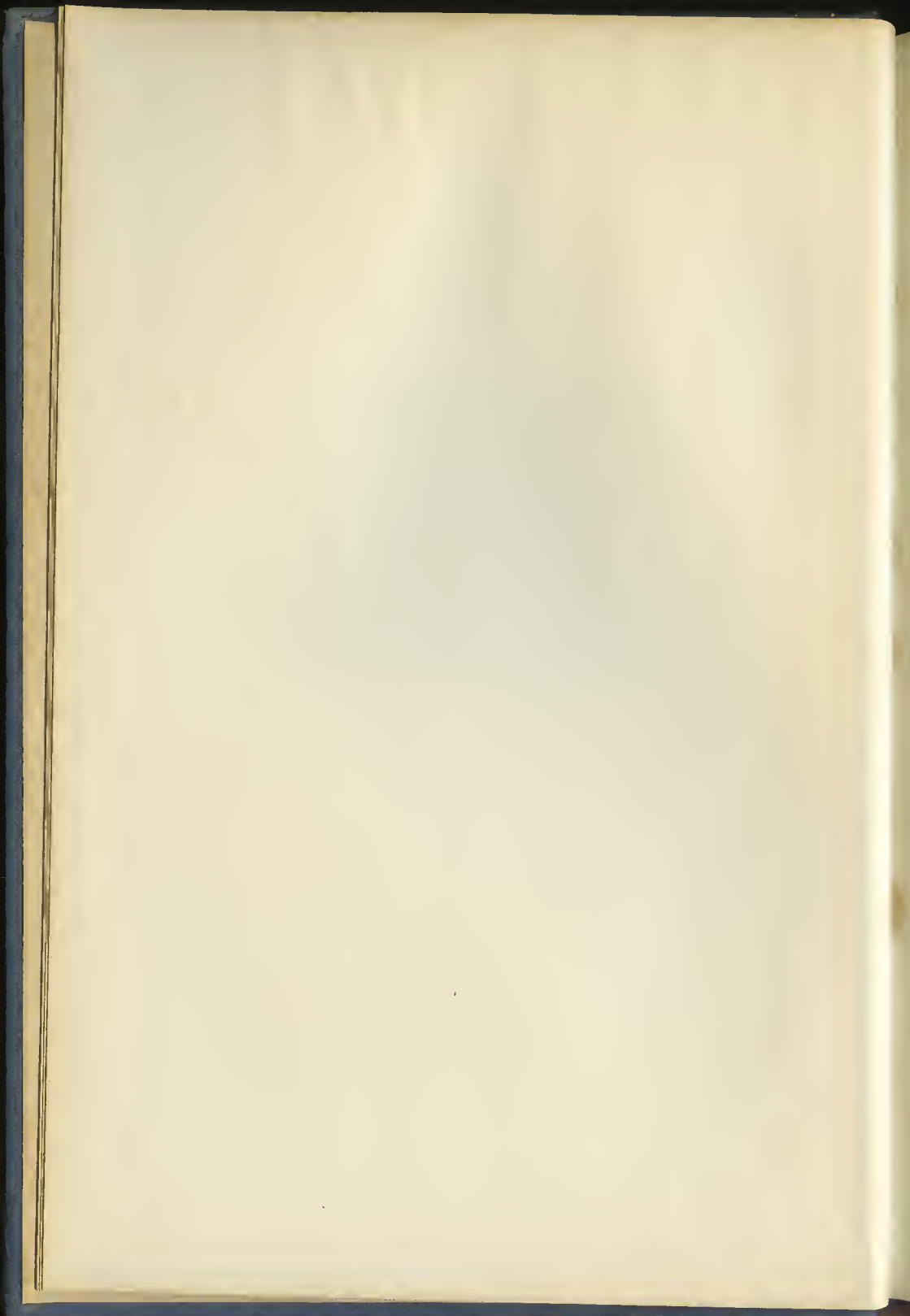
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FOREWORD

THIS report of Director William S. Dix covers the activities of the Committee on Private Research for the period from September, 1940, until July, 1942. The intention of the Committee was to break the ground for this new project and to examine the possibilities for future endeavor. As is amply shown by the report, the earnest work of the Director and his associates has been successful in demonstrating the widespread existence of the amateur scholar with an interest in a great range of subjects, and in showing the opportunity for university help for such persons. For the amateur scholar does need help; alone he consumes time in mistakes and useless effort and sometimes becomes discouraged. With the aid of such a committee as this one he can be guided into profitable use of his leisure time. In the end the amateur scholar gains in skill and knowledge and the university is benefited by his assistance in scholarly research.

The first stage of the work of the Committee is now complete. In chosen directed ways the Committee on Private Research will continue to function at Western Reserve University. By virtue of financial necessity it

will not spread its efforts so widely as it has during the past two years, but it will still try to bring the intelligent amateur scholar all the help and suggestion which a university can furnish. Several of the projects of the Committee will be carried forward and from time to time new ones will be explored.

This report represents but a small facet of our civilization, our way of life, and our meaning of freedom. It is fitting that it should be published at a time when we are engaged in a struggle to make such a life possible for all men who will avail themselves of it.

FINLEY FOSTER,
Chairman of the Advisory Committee.

PREFACE

THIS is a report on the activities and the conclusions of the Committee on Private Research, set up at Western Reserve University on a grant from the Carnegie Corporation to investigate the participation of the layman in scholarship. The work of the Committee had not been completed when its grant expired and this phase of its study ceased; however, the subject of amateur research is so vast and its implications are so great that no one agency in a single community could ever complete an entirely satisfactory survey of the whole problem. We who have taken part in the work of the Committee on Private Research hope that we have cleared the ground at least, that a few of the seeds which are now lying dormant will find it possible to spring up. And especially do we hope that other institutions will see the need of such activity in their own communities. I promise to anyone who takes part in the task an interesting experience. He will meet people who are original: a few crackpots, a few men of genius, and many normal American citizens who have learned to utilize their spare time in a gratifying way.

A preface has this special excuse for being — that it may afford to the repressed writer an opportunity to indulge in the unrestrained use of the first person singular. My own use of this boon is in thanking the many men and women who have given their time and thought to the work of the Committee on Private Research. I wish that

it were possible to express my appreciation to the two men, no longer living, who paved the way for their successor in directing the Committee, Professor Robert C. Binkley and Professor Harold A. Blaine. I can thank here Miss Adeline Barry and Miss Elaine Williams, the successive Executive Secretaries, who so efficiently performed the multifarious tasks of that post. I can thank also the members of the Advisory Board, who loaned the weight of their reputations and the wisdom of their experience to the Committee: Finley M. K. Foster, Department of English, chairman; Paul Bellamy, Editor of the *Cleveland Plain Dealer*; Elbert J. Benton, Department of History; Harold T. Clark, Cleveland Museum of Natural History; Arthur C. Cole, Department of History; James Holly Hanford, Department of English; Herbert C. Hunsaker, Dean of Cleveland College; Bertha M. Luckey, Cleveland Board of Education; William M. Milliken, Cleveland Museum of Art; Laurence H. Norton, Western Reserve Historical Society; Daniel P. Quiring, Department of Biology; Grazella P. Shepherd, Department of Radio Education; Gordon W. Thayer, Cleveland Public Library.

To express my appreciation to the individual faculty members of Western Reserve University who have helped would be impossible; I can only say that their generosity has strengthened my belief in the unselfishness of the academic spirit.

WILLIAM S. DIX,
Director.

June 30, 1942.

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CHAPTER I

THE GROWTH OF AN IDEA

THIS is the story of an idea. It began in the mind of Robert C. Binkley, Professor of History in Flora Stone Mather College of Western Reserve University, a mind in which new thoughts always found a hospitable climate. The idea, developing like a vine, emerged as a casual feeler from this fertile soil and grew until it embraced factors involving the whole future of American education. Still far from maturity, it awaits transplanting and multiplying.

FROM INCEPTION TO REALIZATION

AS FAR BACK as 1934 Professor Binkley was considering the problem of layman scholarship. As a professional scholar engaged in research, he saw how large a percentage of his time was occupied with routine ground work which any educated person could perform. As a man whose unquenchable curiosity led him to seek information from all kinds of people, he realized that the scholar could learn from the industrial efficiency expert. No manufacturing company would pay an expensive specialist, say a chemical engineer, to dig the foundations of a new plant, to do work which unskilled labor could do. Yet in the academic world fine scholars constantly are occupied in checking newspaper files and in other tasks equally pedestrian. Is it not possible, he asked, to redis-

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tribute the labor of research so that it will be parallel to the system of industrial specialization? One step in this direction would be the hiring of persons of relatively little training to do the spade work.

There is, however, one great difference between the business and the scholarly worlds. Few people would dig ditches for pleasure alone; the motivation here is profit only. Yet even the professional scholar works for something more than his salary. At the present level of academic incomes, no one would deliberately choose a career of scholarship did not the nature of his task compensate in part for his small salary. Would not this undefined satisfaction that comes from research be ample compensation to encourage volunteer workers to engage in the lower levels of scholarship and thus leave the professional scholar free to correlate their findings and to draw conclusions from them?

With all of these thoughts in mind Professor Binkley prepared, in 1934, a memorandum on a possible investigation of the whole problem of securing the assistance of laymen in historical research:

Project to study possibilities of redistributing research work to have a greater load carried by persons who are not in the employ of university or research institutions. The first step in this project is to be the preparation of a Manual on Local Studies.

1. Two classes of people are involved:
 - A. Persons with thorough training in scholarship, but with jobs that leave them (a) too little time

FROM INCEPTION TO REALIZATION

or (b) inadequate access to materials to permit them to carry out the kind of research they are now trained to do.

B. Persons with no special preparations for a professional scholarly career, but with liberal education and intellectual interests.

2. These persons to be influenced through teaching at the graduate school level for Class A, and the undergraduate level for class B. The primary purpose is not to reach the generation that has already completed its education, but to affect those who are still in school.

3. Given these classes of people, and this method of influencing their behaviour, what improvement in research activity can be expected and at what levels of action, indicating the following questions:

(A) Can they be taught to refrain more than at present from action damaging to materials for research?

(B) Can they be taught to prepare certain classes of materials for research, thus extending the quantity of material available to scholars, and improving its organization?

(C) Can they be taught to make contributions to research where descriptive techniques are involved?

(D) Can they be taught to make contributions to research where analytical techniques are involved?

4. A scholar to work three years with Blegen, Buck, Gras, Binkley, and others on the preparation of this manual.

Obviously at this time Professor Binkley had not realized all of the implications of the new idea. He was

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thinking essentially of historical research and of the amateur only as auxiliary to the professional. The whole question of a suitable stimulus to induce the layman to take part in research had not been thought through.

By the following year, however, he had realized the importance of such participation to the individual citizen. The layman who takes part in research is not merely breaking the ground so that another man can reap the harvest; he is learning many things, and the program through which he learns is not a trick by which he is exploited so that the scholar may secure free labor, but a process of education which is of real moment to the citizens of a democracy. Professor Binkley indicated the two-fold aspect of the idea in an article published in the *Yale Review*. Local studies were especially emphasized as a fertile and unploughed field for the volunteer worker.

Throughout all local studies there runs a double thread. First, there should result from this activity a vitalizing of education and an increase of critical self-consciousness in the community, which should bring about a wholesome attachment to it, a sense of participation in it, offsetting the overshadowing attraction of the big city. Second, there should result from these studies a record of some kind, duly entered in the records of learning, duly made available to all who may wish to use it, and safely preserved for the future.*

In April, 1935, in a letter to President Leutner of

*"New Tools for Men of Letters," *Yale Review*, XXIV (March, 1935), 535.

FROM INCEPTION TO REALIZATION

Western Reserve University, Professor Binkley made the initial step toward a practical program.

The practical steps to explore the ground in the sense indicated in that program for local culture would be the following: (1) a person to be appointed to work with the Cleveland Public Library, the University, and the local newspaper literary columnists to promote the distribution among readers, the depositing libraries, and the sale in stores of literature in near-print form. These agencies are willing to cooperate. A three-year appointment would show what could be done; (2) the appointment of a man who might work primarily with the History Department of the University, but also with the National Park Service, the Historical Museum, and the Public Library in the promotion of research in local history by people who are not professional historians. The results of this man's work at the end of three years would not be very large in the way of any completed work in local history, perhaps not even in the collecting and calendaring of documents and papers in private hands, or the care of old business records, in all of which matters he would interest himself, but there would be one definite achievement which he could be expected to produce in about three years' work, and that is a handbook or manual which would show about what kinds of work in scholarship, that would be useful to scholars, can be done by non-professionals, what kinds should not be done by them, and how they can be trained and led in doing what they can do and in keeping off the ground they should not occupy.

The depression, in the meantime, brought an opportunity to test the ability of the untrained worker under

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the guidance of experts to carry on research at the lower levels. Under the direction in part of Professor Binkley, there was set up in Cleveland a WPA project through which hundreds of unemployed white-collar workers were put to tasks ordinarily done by scholars, the indexing and abstracting of newspapers and the surveying of manuscript collections. When one considers that none of the actual workers had scholarly training, the accuracy of the finished product, published in a long series of volumes as the *Annals of Cleveland*, is remarkable. The same sort of untrained personnel also compiled a great union catalogue listing over two million volumes in libraries in Ohio and Michigan. The ability of the rankest layman to break the ground for the professional scholar was demonstrated.

By his experiences with college history courses in which undergraduates were sent back to the original records to do research papers, and especially in a popular course in local historical writing, Professor Binkley was convinced that research had sufficient appeal to hold the interest of beginners. What remained to be investigated were the work already being done by amateur scholars in various fields of learning, the methods by which the layman could be stimulated and helped in this activity, the departments most suitable for amateur work at various levels, and the possibilities of preparing college students to carry on leisure-time scholarship after the end of their formal education.

To study these problems an elaborate project was

FROM INCEPTION TO REALIZATION

planned, calling for an expenditure of \$42,000 and obviously requiring foundation support. Professor Binkley expressed his ideas in a comprehensive memorandum entitled, "Project to explore the possibility of promoting non-professional creative activities in research and *belles-lettres*." In his memorandum the program was summarized:

The practical plan here proposed calls for two successive measures:

First, an exploration. This would consist of (a) a survey of problems in research and uses of materials for research suitable for non-professional work, and (b) a census of actual and potential labor-supply, a personnel study of non-professional workers now active and of those who might become active, and of the kinds of stimulus and training to which they would respond.

Second, an experiment. If the exploration yields positive results, the next step would be an experiment to provide (a) stimulus, possibly through some self-supporting organization of scholarship and letters on a local base, with a system of awards for achievement; and (b) training, probably by reaching students through a university teaching staff. An "institute" could convey to a university teaching staff *in situ* the ideas resulting from the survey. The faculty, with minimal dislocation of curriculum, could train the students for non-professional scholarship, graduating them into a non-professional organization which would nourish and maintain their interests. The structure of this organization would be determined by the facts uncovered in the census. The experiment must be made in a university where gradu-

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ates, in the main, come from and return to the local area — a condition met at Western Reserve University.

The idea had grown until by this time Professor Binkley could state its real implications in another memorandum:

The whole prospect of intellectual activity is indeed vast, but let us realize our part in it. It is as if we were looking at a great bridge rapidly nearing completion. For the construction of this bridge the investment has been made, and what we do will not change it. That which I compare to the bridge is an array of new techniques in record-making and copying that are more revolutionary than anything since printing, a challenge to the intellectual tradition and universality of scholarship that is more basic than anything since the Protestant Reformation, an expansion of higher education to a place in American society approximated by European army training, and finally an appearance, almost incredible in world history, of a "problem of leisure."

The result of all this planning, after Professor Binkley's memoranda had been discussed and analyzed by many scholars, was a grant of \$10,000 made on March 14, 1940, to Western Reserve University by the Carnegie Corporation of New York. Before any further plans could be made Professor Binkley died suddenly, leaving all details of the program unformulated. The loss of his wide-ranging imagination and his contagious enthusiasm, especially essential at this stage of the new experiment, was a severe blow.

THE AMATEUR SCHOLAR IN THE PAST

After a period of reorganization, Professor Harold A. Blaine, of the English department of Adelbert College, Western Reserve University, was appointed as Director of the program. Professor Blaine brought to the new enterprise a deep interest in American culture and an unbounded enthusiasm for the possibilities of local research. Miss Adeline Barry, who had been Professor Binkley's secretary and who knew more than anyone else about his plans, was engaged as Executive Secretary. Mr. William S. Dix was brought from the University of Chicago as Research Associate. It was decided to call the new agency the Committee on Private Research. An idea which had been growing for six years was about to receive a practical test.

The problem of converting armchair proposals into a workable program of activities was a serious one, especially without the advice of the man who had thought the whole thing through. The general purpose was obviously to foster amateur scholarship. But where should one start? Who was this generic *amateur scholar*?

THE AMATEUR SCHOLAR IN THE PAST

A GLANCE AT THE history of culture through the centuries provided examples of layman scholarship. Seventeenth-century Italy was dotted with clubs composed of dabblers in learning, gentlemen who carried on scholarship for the pleasure which they derived from it. The professional scholars of the day derided their activities, much as their modern counterparts make fun of many

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of our women's clubs which conduct study programs, but the importance of these Italian organizations in elevating the general level of culture is now beginning to be realized. They mark at once the decline of the Italian Renaissance and the beginning of the modern diffusion of learning.

Eighteenth-century England was rich in amateur scholarship. Horace Walpole's collections of antiques and his attempts to reproduce what he thought was Gothic architecture were unscientific, but they were motivated by a real love of study. Bishop Percy's collection of old balladry was inaccurate, but it became a landmark of its kind. To be sure, these men were dilettantes, not thorough scholars. Yet their influence was tremendous. It requires little stretching of the truth to say that the effect of Walpole's hobby at Strawberry Hill can be seen in the streets of every American village in the Victorian pseudo-Gothic architecture of the local magnate's mansion. Percy's ballad collection was the wellspring of one phase of the romantic movement in English literature.

America, too, had its amateur scholars in the eighteenth century. Benjamin Franklin and Thomas Jefferson were almost ideal examples of the *genus*. The former was by profession a printer; yet by avocation his research carried him into widely varying fields. His experiments in electricity, which won for him a fellowship in the Royal Society, are familiar to every schoolboy. When he sailed for Europe on an important diplomatic mission, he was not too preoccupied to keep a careful chart of ocean

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currents. Travel on a canal boat aroused his curiosity and impelled him to make a model to experiment on the relation between the depth of the canal and the speed of the boat. A hasty glance through the ten-volume edition of his works reveals published articles on the currency system, methods of education, electricity, meteorology, Indian history, religion, and a new system of spelling. From such weighty subjects he turned often to an examination of life's minor annoyances. His advice on overcoming insomnia is still useful, and his pamphlet *On the Causes and Cure of Smoky Chimneys* remains a handy guide for the possessor of a fireplace.

The important thing is not so much what he did as the spirit which he displayed, the insatiable thirst for knowledge that led him to investigate for himself every interesting fact that caught his attention. A letter to his friend, Peter Collinson, about lightning rods shows that he had the attitude of the amateur at his best:

These thoughts, my dear friend, are many of them crude and hasty; and if I were merely ambitious of acquiring some reputation in philosophy I ought to keep them by me till corrected and improved by time and further experience. But since even short hints and imperfect experiments in any new branch of science, being communicated, have oftentimes a good effect, in exciting the attention of the ingenious to the subject, and so become the occasion of more exact disquisition, and more complete discoveries, you are at liberty to communicate this paper to whom you please; it being of more im-

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portance that knowledge should increase, than that your friend should be thought an accurate philosopher.*

Thomas Jefferson was another eighteenth-century American who was an amateur scholar. A trip to Monticello gives visible evidence of his ingenuity. His study of the Maison Carrée at Nîmes is reflected in the Virginia State Capitol, and his research into Palladio helped make him the first great American architect. Active research in dozens of subjects as different as Anglo-Saxon and horticulture, geology and music, was sandwiched into a career as lawyer and statesman.

The day of such omniverous giants has gone, and a man of the twentieth century, even though he be a giant, can no longer hope to master the technique of research in so many fields, but the sort of intellectual curiosity which impelled their studies still exists. The English country gentleman or village vicar who carries on the traditional line of private scholarship still flourishes. In spite of the war a survey of the *London Times* still reveals letters to the editor from sharp-eyed amateurs correcting the errors of professional specialists.

The constant factor is a certain attitude of mind. Mr. Bliss Perry years ago discussed it delightfully in his essay, "The Amateur Spirit." He pointed out that the amateur is etymologically and actually the *amator*, the "man who loves," the man who works for the sheer love of working. He wrote:

*Albert Henry Smyth (ed.), *The Writings of Benjamin Franklin* (New York: Macmillan, 1905), III, 162.

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Let us make the very fullest acknowledgment of our debt to the professional spirit. Many of our best inheritances, such as our body of law, represent the steady achievements of professional skill, professional self-sacrifice. . . . Yet is it not possible, while thus acknowledging and cultivating the professional virtues, to free ourselves from some of the grosser faults of the mere professional? The mere professional's cupidity, for instance, his low aim, his time-serving, his narrowness, his clannish loyalty to his own department only? How often he lacks imagination!*

In his reminiscences written thirty years later, Mr. Perry gave an excellent illustration of the amateur spirit. He told of meeting an interesting American in the Strasbourg Cathedral and later in Florence.

"What have you been doing since you left Strasbourg?" I asked.

His face became beatific in its happiness. "Do you know," he answered, "I've been puzzled all my life to know how the Romans stretched those big curtains over their amphitheatres. I've been in Arles and Nimes, crawling on my hands and knees around those amphitheatres, and studying the sockets where they fastened the poles. I believe I know just how they did it."

"Look here," I exclaimed; "I'd like to know who you are."

"Me? I'm a boot and shoe man from Fort Wayne, Indiana."

I should have liked to tell Ten Brink about my friend from Fort Wayne, but no European professional scholar

*Bliss Perry, "The Amateur Spirit" in *The Amateur Spirit* (Boston: Houghton, Mifflin and Company, 1904), pp. 27 and 29.

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could have understood the intellectual curiosity of that untrained American amateur.*

This, then, was the kind of man who must be sought out in Cleveland. It was soon decided that to learn anything about the layman scholar the Committee must expand Professor Binkley's projected "census" to include phases of the "experiment." One must observe the amateur, evaluate his methods and his results, assist him in his problems. To do these things the Committee must be not only a passive body seeking statistics but an active agency working with the amateur.

THE COMMITTEE ON PRIVATE RESEARCH

THE FIRST informational bulletin of the Committee, issued on October 9, 1940, summarizes the program originally offered and since carried out:

The Committee feels it has definite services to offer the non-professional scholar:

- A. It can help bridge the gap between the non-professional and the professional scholar by acting as a clearing house.
- B. It can secure for the amateur the technical advice and guidance of professional scholars.
- C. It can serve as a center of information on special collections of materials in libraries, and perhaps it can place such collections within the reach of the qualified researcher.

*Bliss Perry, *And Gladly Teach* (Boston: Houghton, Mifflin and Company, 1935), p. 111.

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- D. It can assist in discovering those fields of investigation which are most neglected and at the same time are most inviting to research (such as the field of local studies, where the materials are immediately at hand).
- E. It can offer technical assistance in the preparation of manuscripts.
- F. It can be of probable assistance in the commercial publication of material.
- G. It can offer technical advice and practical assistance concerning a whole range of non-commercial techniques of reproduction of research studies.

In short, the Committee will try to be of service in initiating and furthering the scholarly interests of the non-professional scholar in the Cleveland area.

One of the most difficult problems was how to locate the amateur scholar. Probably no practicable method of reaching every actual or potential amateur could be devised. Through a combination of methods, however, the Committee has found in the Cleveland area more layman researchers than its limited staff could study adequately. The initial newspaper story, sent out over the wires of the Associated Press and the United Press, brought responses from amateur scholars all over the country, as well as from local people to whom the Committee could be of more assistance. Later, newspaper accounts of various Committee activities continued to bring in inquiries. A small poster which was displayed in libraries, churches, and schools made the new agency known to many laymen. Librarians were asked to submit the names

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of amateurs known to them. A series of radio programs was useful. Committee representatives were asked to talk at the regular meetings of clubs of all kinds.

Through all of these avenues amateur scholars heard of the Committee on Private Research and sought assistance. In nearly all cases personal interviews followed; frequently a long series of conferences developed as the man's work progressed. The following chapter describes the research of some of these amateurs in the Cleveland area. In many more cases the intangible factor of encouragement, the knowledge that a university was interested in their work, seems to have been of more real value to the amateurs than any definite assistance. They were enthusiastic in expressing their appreciation, even at times when the Committee felt that it had been able to do nothing. It is impossible to realize the eagerness and the enthusiasm that are a part of the amateur spirit unless one has had the pleasure of working with layman scholars.

As the Committee progressed, various ways of gaining recognition for the amateur were planned. In a series of radio programs non-professional scholars told of their interesting discoveries. In the summer of 1941 the Committee sponsored at the University the Summer Institute on the Western Reserve, a series of lectures daily for three weeks in which amateurs and professionals spoke on various phases of the archaeology, history, and sociology of the region. The Committee has acted as a lecture bureau securing amateur scholars as speakers for clubs and other organizations. A broadside publication, *The*

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Amateur Scholar, has made known the research of many others and has broadcast news of the various projects under way. Other methods of gaining recognition for the laymen are discussed later.

The amount of work that could be done was dependent entirely upon the time that could be put in by the Committee's staff. There was no shortage of amateurs; a more intensive publicity program would undoubtedly have revealed more amateurs. The staff was always limited. The illness of Professor Blaine three months after the inauguration of the program and his death in June, 1941, was another serious blow to the project. His vision and his energy were responsible for the conversion of an unformulated idea into a practical program. In spite of a second grant from the Carnegie Corporation, it was felt wise to reduce the staff and thus enable a narrower program to continue longer. Mr. Dix became Director, and Miss Barry, who left for a position at the Library of Congress, was ably replaced as Executive Secretary by Miss Elaine Williams.

CHAPTER II

THE IDEA UNDER THE MICROSCOPE

FOR a year and a half the Committee on Private Research has been working with amateur scholars of varying degrees of proficiency. It has suggested projects to laymen who were interested in research but did not know where to begin. It has helped to map out courses of study for beginners who knew exactly what they wanted to do but lacked the essential technical training. It has stood at the elbows of competent advanced private researchers and watched them as they wrestled with problems which occupied their leisure-time studies.

Thus it is with some confidence that a commentary on the status of the amateur with relation to scholarship is attempted. This study is based on experience with about five hundred layman scholars. Since the Committee has been concerned with all degrees of excellence, the sole criterion for inclusion in its card file has been the manifestation of sufficient interest to request information or assistance. That is, the Committee has made no effort to do more than bring its activities to the attention of potential or actual non-professional researchers, has conducted no campaign to sell an activity program or to enroll members in an organization. As a matter of fact, unsolicited requests have occupied the full attention of its staff. For our purposes here, then, an "amateur

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scholar," in addition to possessing the "simon-pure" qualifications already described, is a person who has manifested enough interest in some field of scholarship to seek out the Committee on Private Research and make known to it his problem. This minimum evidence of initiative does not eliminate the dilettante, nor should it, but it does rightly exclude the man who one day, when he finds time, hopes to take a course in chemistry or to start a study of Sanskrit. Essentially this is not a survey of inclinations but of activities.

The absence of statistical tables or charts in this report will be noticed. It was soon realized that to learn something about the interests, the activities, the competence of the amateur, one must make a far more thorough investigation than can be conducted through a series of questionnaires. How competent is this man? Can he make a contribution which will be accepted by the professional scholar? What are his faults? How can he be made to realize his weaknesses and remedy them? These are a few of the many questions that should be answered in the case of each researcher. And since there is yet no satisfactory way of securing the answers to such questions on paper, since methods of measuring and evaluating amateur effort are yet to be worked out, it was felt that statistics would be useless. In their stead have been placed case histories, accounts of experiences with individual amateur scholars in widely varying fields of study. These summaries are the product of actual observation of the student at work in the library, in the

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laboratory, and in the field. Through repeated conferences, background, training, and inclinations have been investigated. Notes on work in progress and completed studies have been read by members of the Committee and in most cases have been evaluated by several professional specialists. It is impossible to reduce such material to satisfactory charts and difficult to document it in limited space; therefore, there are no tables and few footnotes.

It is obvious that the layman scholar often lacks the broad background which would enable him to correlate the results of his own investigation with those of other researchers, to orient his findings with relation to the whole mass of existing scholarship on the subject, and to produce a critical and definitive monograph. Even if he has the necessary scholarly equipment, he is essentially a leisure-time worker and lacks the time to cover the whole field with a necessary thoroughness. This relegates the activities of the amateur often to the preliminary rather than the final stage of research. This does not imply that the work of the layman scholar is necessarily of secondary importance, merely that his endeavors are concerned more efficiently with the exploration and collection of data rather than with its evaluation. Both phases are essential. Rare today, with the ever-mounting flood of scholarship on all subjects, is the Malthus who can as an amateur synthesize all that is known about a subject and project from it a new major theory. The Committee, therefore, has emphasized especially those pursuits which

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can be of great value as groundwork on which the full-time scholar can build.

If the individual amateur can clear the weeds from his own acre and find one buried root of undiscovered truth, twenty amateurs can thoroughly explore twenty acres — or perhaps thirty, provided their efforts are carefully coordinated and apportioned. Therefore, when there has been sufficient interest in a suitable field, the Committee has endeavored to map out the work of the laborers and to provide for them competent supervisors. These group experiments in widely different subjects of study, involving a broad range of techniques, are described in the pages that follow, along with accounts of the work of individual amateurs.

The following examination of the layman at work in various branches of learning makes no pretense at being definitive. A few sample cases have been chosen to illustrate what he apparently can and cannot do. The specialist in any one of the fields mentioned will think of many other ways in which layman effort has been or could be utilized. If this report suggests the possibilities of the idea of nourishing the amateur spirit and stimulates further investigation, the Committee will be satisfied.

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THE COMMITTEE ON Private Research has limited the scope of its activities to an investigation of the position of the amateur in *research*. Professor Binkley was interested also in the layman's participation in the creative

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arts, especially writing, but it was soon discovered that there must be some limit to the range of the Committee's study, and that a distinction could be drawn between creative work and research. The line of demarcation is arbitrary, and many research papers would undoubtedly be the better for an infusion of creative writing. The problems of the amateur poet, painter, and composer are, however, different from those of the amateur researcher. Although the artist often builds on the foundations laid down by historical scholarship, artistic expression is essentially the statement of the artist's ego; he can be guided to new mediums, can be taught techniques, and can be helped in many ways, but these activities can be distinguished from the usual tasks of scholarship.

Furthermore, in spite of the great corpus of stories about unrecognized genius, the artist finds many more agencies with an eye to his encouragement and welfare than does the layman scholar. In Cleveland the amateur graphic artist or craftsman can exhibit and sell his work under the same conditions as the professional at the annual May Show of the Cleveland Museum of Art. The non-professional poet can find an audience for his verse through the Ohio Poetry Society. There are many, although not enough, organizations through which the amateur in most art forms can find an outlet, while the layman scholar has great difficulty in getting a hearing.

The distinction, then, between creative work and research is especially necessary in the humanities. After limiting its general investigations to the latter activity,

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the Committee had to determine the legitimate part which the layman can play in approaching the humanities.

Research in the arts consists principally of the historical study of art forms. The development of American architecture is a subject on which the amateur seems to work with pleasure and with excellent results, both the local historian and the photographer making contributions. The Committee has made a rather thorough investigation of the possibilities of this type of research. Although the Historic American Buildings Survey has collected detail photographs, scale drawings, and historical material on hundreds of buildings of architectural importance, there remain many more in immediate danger of destruction before any permanent record of them is made. In addition to those buildings which are of great beauty or historical significance, there are the countless houses, churches, and miscellaneous structures which characterize American life and taste, generation by generation. Mr. Lewis Mumford writes to the Committee, "Often people on the lookout for historic buildings dismiss as worthless those whose style is not familiar or orthodox or does not harmonize with their private taste; whereas these very buildings may be rich in meaning for the architectural or historical student. The factories and loft buildings and warehouses, between 1840 and 1900, or even later, belong to this neglected domain; and the lack of adequate records here in most cities makes most of our architectural history incomplete, capricious, and full of crude, half-baked generalizations."

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Because it seemed that the amateur scholar was well equipped to help fill in this gap in the records, the Committee decided to test this theory, assisted by Dr. Finley M. K. Foster, Oviatt Professor of English in Western Reserve University and an expert amateur photographer; Mr. I. T. Frary, of the Cleveland Museum of Art, author of *Early Homes of Ohio* and other books on history and architecture; and Mr. Francis Bacon, Dean of the School of Architecture of Western Reserve University. These men prepared the copy for a little manual of suggestions on collecting architectural data. This was sent to various architects and historians for suggestions and corrections. The pamphlet answers many of the natural questions of the layman: What types of buildings are of interest? What details should be photographed? Where can I find the date of building? What books are useful in the study of Ohio architecture?

The original plan was to arrange a series of excursions by groups of amateur photographers to interesting old towns where, in the course of a day, the whole region could be combed for objects worth photographing. This project was found to be impractical; the uncertainty of the weather, to which the camera enthusiast is extremely sensitive, makes it difficult to plan such excursions far enough in advance to assure a good attendance. Therefore, the Committee modified its program to one of urging camera clubs and individual amateur photographers to take up architectural photography. Often the chief interest of amateurs is in the making of salon prints,

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but many of them can be converted to record photography, where standards of beauty and detail are equally exacting. Frequently the photographer is interested only in the technical problems involved and not in the collection of historical data. The Committee has encouraged historically-minded people to collaborate with the photographers in gathering this information.

All of this collected material is of limited value unless it can be made available to the scholar. Since publication costs are prohibitive, the ideal solution of the problem of distribution is the deposit of negatives in a library which has facilities for reproduction on order. However, many libraries are unequipped for this service and many photographers are unwilling to part with their good negatives. Most amateurs, though, are glad to donate prints, and the compromise solution is the preservation of bound volumes of mounted prints, together with the accompanying historical data.

As an experiment, members of the Committee talked before groups — including a garden club, a camera club, and a Rotary Club — in four small Ohio towns, proposing the starting of volunteer projects to record local architectural history. Two of the four towns set up committees which are now at work. As a further demonstration, a group from Cleveland made a thorough photographic study of Peninsula, a tiny Ohio canal town. The Peninsula Garden Club undertook the gathering of the necessary historical data as its project for the year. The result is a rather complete volume of photo-

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graphs and text, all collected under the supervision of experts.

Many individual amateur photographers are making extensive collections of architectural camera studies, some of them specialized as to subject or locale. For example, one woman has made dozens of pictures of covered bridges. The suggestion that collections of this type be deposited in museums and libraries seems to be well received. One professional photographer, whose files comprised a pictorial record of his town's history for the last sixty years, has donated a memorial room in the Elyria, Ohio, Public Library, where his collection is permanently displayed. The idea grows rapidly once the seeds are spread. A Cleveland camera club has just initiated an elaborate program in which its members will photograph historical buildings and landmarks all over the state. Such collections have proved their worth to professional scholars. Recently an Ohio State University graduate student writing a thesis on the development of log-cabin architecture sought suggestions from the Committee. It was possible to direct her to exactly the sort of pictorial source material she needed.

The study of the history of painting as well as of architecture offers an opportunity for the amateur to take part in another type of research in the local area. These local studies are especially good mediums for the activity of the layman; the material is at hand and in many cases is as yet unworked. Western Reserve University, the Cleveland Museum of Art, and the Western Reserve

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Historical Society are setting up a program to study and photograph the work of early Ohio painters. The growing interest in the work of those nomads who traveled about painting everything from barns to children in return for "board and keep" makes this project a timely one. With Mr. I. T. Frary as chairman, the Committee on Early Ohio Paintings is making a thorough survey, supplemented by photographs which will be filed in the Cleveland Museum of Art. Under the supervision of these experts, amateurs will participate in the program. Springing out of the work of the Committee on Private Research, the new project is a demonstration of the speed with which the seeds of these ideas about amateur scholarship can take root.

The other arts offer similar opportunities for group historical research. In 1941 Professor Arthur Quimby suggested to the Committee a project for a history of music in Cleveland, to be written by amateur scholars. An advisory group, composed of prominent local musicians, musicologists, and music librarians, worked out in a series of meetings a full outline of chapters to be written. Letters to musical organizations and posters in churches, clubs, and music stores, soon brought forth about forty volunteers, to each of whom was assigned a phase of the work in which he had a special interest. They have dug out collections of programs, interviewed old-timers, studied the manuscript records of church choirs and singing societies, and consulted newspaper files. In most cases their love of music has been the path through which they

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were led to an unfamiliar but fascinating avocation, historical research. The finished chapters are, of course, uneven in quality, and the next step is the editing of the manuscript by the advisory board. The original plan called for an attempt to publish the completed history by the subscription method; but for the present time typewritten copies will be deposited in the libraries in Cleveland.

The experiment has been a pronounced success. All kinds of people have discovered the fascination of leisure-time research. A chapter on light opera has been written by a newspaper editor, one on Cleveland composers by a legal stenographer, one by a concert pianist on foreign musical clubs, one by a dentist on a singing society, and one by a lawyer on a male chorus. That these layman researchers have not found their quest for forgotten facts dull is indicated by delighted reports which they bring back — reports of the enthusiasm with which one-time prima donnas produce yellowed clippings and of the difficulty of damming the flow of reminiscence. A librarian has described with amusement the three-hour study of a file of dusty church records by two matrons who approached their task with the gossiping ardor usually characteristic of the Wednesday afternoon bridge party.

The project just described is local in both scene and subject. When one enters the realm of the folk song and the popular ballad, however, the implications of local studies assume new proportions. The collecting of folk ballads has, since the day of Bishop Percy and his *Re-*

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liques of *Ancient English Poetry*, appealed to amateurs, and several excellent and more modern volumes could not have been compiled without their aid, as, for example, Cecil Sharp, *English Folk Songs from the Southern Appalachians*; Gardner and Chickering, *Ballads and Songs of Southern Michigan*; or Reed Smith, *South Carolina Ballads*. In all of these volumes, as in nearly any collection of folk tunes, acknowledgment is made to the hundreds of amateur ballad singers who assisted the authors in the interpretation, notation, and recording of folk music. Often the authors are themselves not professional musicians; the standard anthology of Ohio folk music, *Ohio Songs and Ballads*, is the work of a retired schoolteacher, Mary O. Eddy.

The study of foreign and American ballads has been thorough and widespread, but almost no effort has been made to investigate native folk songs brought to America by immigrants and modified by American tradition. Because Cleveland, with its large foreign-speaking population, is an ideal center for such an investigation, Dr. James Holly Hanford, Professor of English in Western Reserve University, has worked with the Committee on a survey of foreign groups and their response to such an undertaking. The idea has been received eagerly by those approached — the editor of a Hungarian newspaper, a Greek doctor, a leading Italian businessman, a German professor and amateur lutanist, a Finnish schoolteacher. The general plan seems practical and uncomplicated. The first step would be to make mechanical recordings of

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ballads sung by immigrants. Several experimental recordings have already been attempted with success. The development of mechanical systems of transcription has extended the range of amateur activities in the collection of musical and linguistic data. Equipped with a recording machine, the most untrained layman can collect fugitive material which can then await the examination of trained scholars. Amateur field-workers, drawn chiefly from second-generation Americans, would be useful in locating older people in their own nationality groups who know songs, and in arranging for transcription and translation. The second step would involve a careful comparison with the Old Country originals and an analysis of the American influence.

This project has obvious connections with the project to explore non-English languages in the United States, now being undertaken by the American Council of Learned Societies. Its sociological implications are tremendous, especially at this time. One of the best ways of curing some of the inferiority complexes which are developing with dangerous reactions among certain nationality groups is to make them understand that we value the native traditions which are their contributions to American culture.

The study of philosophy attracts some amateur scholars. Unfortunately, this branch of the humanities seems to have a strong fascination for crackpots, most notably the gentleman who sought the Committee's aid in the publication of a new sacred book which pro-

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claimed him as a new messiah. Since philosophical research can hardly be divided into various levels as can research in art forms where the layman can make a definite contribution to the work of the professional, philosophy seems to offer few possibilities beyond the personal satisfaction of learning. At least one Cleveland, however, is studying Tibetan and another Chinese philosophy. The zeal of the amateur is illustrated by the latter, for a time a WPA laborer; unable to buy books, in a library he copied by hand a Chinese grammar for use at home.

In these subjects where the mere mastery of the language is almost a research problem in itself, the amateur can not hope to make a great contribution. Yet the desire to do research is strong even here. A year ago a telephone switchboard operator with only a high school education came to the Committee and said that she wished to do professional research in Egyptian archaeology. She had, entirely without instruction, learned to read hieroglyphics through hard work in the library. When the difficulty of breaking into professional archaeology was pointed out and she was told that there was no hope of an opening to do advanced work until she had at least an undergraduate degree, her answer was, "Well, how do I get one?" Unable for financial reasons to take regular college work, she won a scholarship at Cleveland College and embarked without hesitation on the six-year course of evening classes leading to the degree of Bachelor of Arts.

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In some phases of linguistic research the amateur can play a part. Volunteers have helped in the compilation of many dictionaries, one of the most recent being the great *Dictionary of American English* now nearing completion at the University of Chicago. To comb the vast body of American books, newspapers, and magazines for the first occurrences of peculiarly American expressions hundreds of readers are needed, and this is the type of work which the layman can do. For such a project which can be broken down into various steps it is usually possible to find volunteers. When the amateur volunteer can be assigned a task sufficiently absorbing and at the same time not too difficult, his interest grows.

Research in literature is usually ill-adapted to such subdivision, and probably for this reason few amateurs seem to be engaged in literary scholarship. Of the many people who take hobby courses in literature in clubs or as individuals, not many go on to anything that might properly be called research. Although by chance both of the Directors of the Committee were English teachers, few Clevelanders have sought assistance on problems of literary research. Yet one newspaperwoman has dug out interesting material on the association of Artemus Ward with the *Cleveland Plain Dealer*, and a Sandusky school-teacher has done ground work for a professional scholar in a distant city on the local career of Richard Tobias Green, Herman Melville's "Toby." In this latter type of work seems to lie the utility of the amateur. If he can be reached through some clearing house, such as the Com-

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mittee, he can often be of assistance to out-of-town scholars in checking newspaper files that exist only in local libraries. The Committee recently received a request from a New York writer for someone to dig up the local record of the literary figure whose biography he is now writing. Several amateurs had indicated to the Committee their interest in just such work, and one of them has volunteered to do the research.

The bibliophile, often an amateur, is of course invaluable in bibliographical matters and often enters the realms of productive scholarship. Many of the publications of the Rowfant Club, a Cleveland society of book-lovers, have been of great value to scholars. The individual book collector often makes a contribution in his own field of special interest. The Committee has been working with one Cleveland businessman on the publication of a 600-page bibliography of horological books, probably the most extensive yet compiled on the subject of clocks.

Still another outlet for amateur activity in the field of language is translation. Several years ago Professor Binkley initiated an experiment for the amateur translation and publication of selections from Latin American literature which has been carried on by the Committee. He described his plan to Senor Samper-Ortega of the Colombian Embassy, editor of the *Seleccion Samper-Ortega de Literatura Colombiana*, a hundred-volume anthology of Colombian literature. Senor Ortega obtained from most of the authors represented copyright releases

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for the publishing of short stories, essays, and novels translated by volunteers. Dozens of volunteers with a thorough knowledge of Spanish asked for selections to translate. When the Committee on Private Research renewed the project, which had been allowed to languish after the death of Professor Binkley, a sample survey was made to evaluate the practicability of the plan. It was discovered that a large percentage of the people interested in Latin America are eager to buy such translations and that more than enough volunteer translators are immediately available. Thus the whole scheme of non-profit translation and publication seems feasible.

A sample volume, a collection of Colombian short stories, has been prepared and could be reproduced in a small edition by the relatively inexpensive photo-offset method at a cost of about fifty cents a volume. The translations were edited by Dr. Ethel Williams, Assistant Professor of Romance Languages, Western Reserve University, who has been active in the project since it was begun. With the current, and, one hopes, lasting emphasis on friendly relations with Latin America, the value of a series of inexpensive translations is obvious; the basis of friendship is understanding, and a wide knowledge of a country's literature is an accessible path to understanding.

The application of the same scheme to scholarly source material should not be impossible. The Library of Congress has microfilm copies of Spanish colonial documents which have never been translated. Such a monu-

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mental set as the "Jesuit Relations" probably cannot be published commercially today, but enlistment of volunteer translators and distribution of copies through inexpensive "near print" processes, such as photo-offset or microfilm, might solve the problem of making source material more widely usable. If the method could be applied to books and records in the more unfamiliar languages, such as those of central Europe, its value to the scholar would be extended. And there are in many American industrial cities foreign-born men and women who are eager to take part in American scholarship. They need only the stimulus of some suitable recognition for achievement.

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SINCE TWO OTHER organizations have been active in the biological sciences, the Committee on Private Research has made no effort to survey carefully the possibilities of amateur research in this field. One of these organizations, the American Philosophical Society's Committee on Education and Participation in Science, operating on a grant from the Carnegie Corporation of New York, has made a study of the activities of the layman scientist in the Philadelphia region. Its director, Mr. W. Stephen Thomas, analyzed the activities of 287 amateur scientific organizations with a total membership of 32,000. In addition, four research projects calling for the joint efforts of many people were set up under the direction of part-time consultants. The nature of these projects is

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stated in the *Year Book* of the American Philosophical Society for 1940:*

1. Botany Project: To accumulate data on the blooming and fruiting of native wild plants through tabulations of dates and weather conditions on charts kept by volunteer laymen acting as observers.

2. Radio and Ionosphere Project: To determine facts concerning the ionosphere, Heaviside layer, through the recording of receptions, fade-outs, and skip-distance occurrences in the course of amateur radio communication.

3. Climatological Study of Delaware Valley through Tree Ring Records: To obtain data in the form of strip records showing "signatures," or patterns, of the annual growth rings of ancient trees in order to determine the weather history of the Delaware Valley prior to 1840. The records to be obtained by volunteer observers and data compiled by them.

4. Zoology Project: To mark, for future recognition, specimens of certain local amphibians, reptiles, and insects so that their habits and life histories may be more accurately studied.

About five hundred layman scientists participated in these four group projects. The Committee on Education and Participation in Science, lacking the assistance of a wide group of specialists, could not set up a consulting service for individual amateurs like that of the Committee on Private Research, which has had the personnel of an entire university faculty immediately available. The

*Pages 320 to 324.

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Philadelphia committee has demonstrated conclusively, however, that "amateur contribution to the making of original observations and the compilation of records under supervision is feasible."*

Another organization to set up a program for the encouragement of the layman scientist is active in the Cleveland region. The Cleveland Museum of Natural History sponsors many activities for the amateur natural historian. Under the direction of Dr. Arthur B. Williams, Curator of Education, the Museum not only conducts such instructive outings as bird walks and tree walks, but also directs, through the various branches of the Kirtland Society, an extensive program of study and research. This society, which derives its name and, indirectly, its origin from Dr. Jared P. Kirtland, the pioneer natural scientist, is composed of these specialized clubs: the Kirtland Bird Club, the Kirtland Tree Club, the Kirtland Geology Club, and the Kirtland Mycology Club. There are also divisions of dendrology, mammalogy, and conchology which are still in the process of organization. Each club conducts one or more research projects.

The whole program offers a splendid example of the way in which a museum can stimulate active interest in scholarship. Because of this well-organized local program for the amateur, the Committee has set up no group

*Ibid., page 327. Mr. Thomas' induction into the United States Army has delayed the publication of a comprehensive study of the whole question of the participation of the layman in science. See for a brief summary the report just cited and W. Stephen Thomas, "Amateur Scientists and Their Organizations," *The Scientific Monthly*, LII (January, 1941), 66-78.

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projects in the field of the natural sciences, but has limited its activities to collaboration with the Cleveland Museum of Natural History and to the rendering of advice and assistance to individual researchers.

One schoolteacher, motivated perhaps by her own annual sufferings, has become interested in the various pollens which produce hay fever and is making an analysis of the exact periods of pollenization of specific trees and shrubs in the Cleveland area. The practical value of this is obvious; in both diagnosis and treatment it will be helpful if the doctor knows the date of pollenization of a certain species to which a patient seems to be allergic. This woman had had college training in biology and had mastered most of the necessary techniques. What she needed were bibliographical information, laboratory facilities, sample pollens, and advice from biologists and allergy specialists. The Committee was able to secure all of these through the cooperation of the biology department of Western Reserve University and the Cleveland Clinic. Such research, auxiliary to the work of professional specialists, is one of the avenues through which the layman scholar can enjoy active participation in the advancement of science.

A similar interest is that of the small town telegraph operator who is searching for the grains of truth which may lie behind various folk remedies. He is currently investigating a wild carrot tea treatment for diabetes which seems to be effective in the case of the old farmer who told him of it. Two years ago he set out on an even

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more audacious quest. He writes in a letter to the Committee, "You surprise me in expressing interest in a backwoods amateur, working without equipment, who may have a one-to-a-million ratio chance of ever developing information new and useful to science. Maybe I can surprise you by showing what the research urge does to me. In 1940 it took me on a ten thousand mile tour over many states investigating a carcinoma treatment. . . ." The supercilious may sneer at this "research urge," but is it not a legitimate manifestation of the same spirit which has for ages driven the scholar? It is true that in most cases any medical investigation conducted by the amateur will duplicate work long since done by the professional, but there is always the chance that, through his lack of bias and of any professional standing to be jeopardized, he will hit upon something of importance. At any rate, the true scientist will desire to verify and analyze any well-authenticated "cures" which the amateur investigator turns up.

The utility of the layman observer in such activities as bird-banding has long been recognized. The same system of amateur field work can be applied to many problems. For example, a Cleveland schoolteacher, a man who once served as a volunteer on Smithsonian expeditions to the Canal Zone and who has distinguished himself by the discovery of rare entomological specimens, came into the Committee offices with a plan for a study of the migration routes of the Monarch butterfly, a subject on which apparently little has been done. Individual

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specimens can be marked, then trapped and observed throughout the course of their flyway by a network of amateur entomologists. This man had made an initial study of the problem, but he could not proceed with the experiment alone, since such projects require the coordinated services of many observers. Here the amateur can find an outlet for his desire to work on a congenial subject.

In this same category belong observations of the life habits of small mammals and reptiles; studies of bird population, nesting habits, and migration; reports on the occurrence and the ecology of trees and shrubs, as well as on their flowering dates. Other projects of this type, involving the participation of volunteers in a planned and directed group program, will occur to everyone. Here especially, where the object is the accumulation of a mass of data from many observers, the amateur can make his contribution.

The camera of the amateur photographer can, of course, be turned to the making of all kinds of scholarly records. Nature photography is a popular and can be a useful phase of this work. An electrical engineer and his wife, advanced layman botanists, have sought advice from the Committee on methods of publishing a volume of photographs of Ohio trees, with emphasis on their contours with and without foliage, as an aid to identification for the beginner. A Cleveland businessman has journeyed to Avery Island in the Gulf of Mexico to make motion pictures of the great colony of nesting egrets; the

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result is a record of definite scientific value. The improvements in high-speed and in color photography have made camera studies of birds in flight and of wildflowers more valuable.

The application of one science to another always brings to the layman opportunities for testing and experimenting. A worker in an Akron rubber factory, who had had some college work in chemistry and who had a home laboratory, applied to the Committee for suggestions as to a research project in chemistry. Professor Frank Hovorka, the Committee's consultant in chemistry, put him to work experimenting with the effects of various chemicals on specific weeds; a long series of such tests should show with which chemicals it is possible to kill certain weeds without harming the surrounding vegetation. The study of hydroponics offers a vast scope for experiments, some of which can be carried on by amateurs. The Committee has secured bibliographical material for a local artist who is making tests in growing plants without earth. Every amateur gardener is a potential layman scholar.

It seems evident, then, that there is great interest in the solution of problems connected with the biological sciences, especially in medicine, natural history, and applied botany. In medical research the amateur can probably be of limited value. In nature and agricultural studies, especially in the collection of data, there are great possibilities, and the large memberships of nature clubs, conservation clubs, and garden clubs testify to the

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widespread interest that already exists. Of course, much of this club activity is of an elementary nature, but the step to the lower levels of research is an easy one; all that thousands of amateurs are waiting for is the opportunity to take part in a carefully planned program. Few of the projects in which the Committee has had a hand have been completed, and it is too soon to say how great has been the "contribution to science." Although it seems probable that work of considerable value is being done, much more important are the social and educational benefits which hundreds of people are deriving from honest intellectual effort expended on an avocation.

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SINCE RESEARCH in many of the physical sciences, like that in the biological sciences, is capable of being subdivided into various levels, these studies offer opportunities for the participation of the amateur. In some of them, however, the pursuit of any real research demands such a thorough mastery of difficult skills and techniques that the part-time student can hardly hope to achieve anything of importance — except, of course, the personal satisfaction that comes from learning something new and difficult. Only the advanced amateur can hope to make worthwhile discoveries in such well-ploughed fields as physics or mathematics. The age when an amateur like Benjamin Franklin could master whole areas of science is gone; complex apparatus has displaced the key and the kite. Yet there is still opportunity for the layman

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who is willing to go along, studying and learning, until he can make his contribution.

Astronomy offers a good example of division of labor between laymen and professional workers. The work of amateurs in the American Association of Variable Star Observers has been notable. In reporting on one year's work, Professor Leon Campbell of Harvard said that among the observers reporting the largest number of sightings were "serious amateurs" to whom the university had lent telescopes.*

Among the members of the association are a Boston wholesale grocer, a master plumber from Pittsburgh, a Baltimore toy manufacturer, a high school student in New Hampshire, an eighty-three-year-old clergyman in Florida, and several housewives. In Cleveland the Cleveland Astronomical Society, with a membership of two hundred, plans a program including the systematic visual estimate of the brightness of variable stars, the making of mirrors, lenses, and mountings for small telescopes, and the systematic observation of meteors.

That the amateur can make significant discoveries in astronomy is demonstrated by the Ohio draftsman who has discovered seven comets and a new star in twenty-five years of stargazing. In reporting his latest discovery, the New York *Herald-Tribune* summarized the position of the layman in astronomy when it said, "Amateur stargazers, it is acknowledged, render a valuable service to astronomy by 'sweeping the sky,' a game for which

**New York Times*, October 14, 1939.

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professionals have no time. The professionals have their research program mapped out for months and even years ahead, and are thus less likely to come across any unusual phenomena, such as a comet, than a hobbyist who directs his telescope wherever he pleases."*

Just as in astronomy, so in other sciences the division of labor can relieve the professional scholar for other tasks. A hundred pairs of alert eyes are better than one. One interesting experiment was the Conference on the Discovery and Preservation of Pleistocene Man, held in Chicago under the auspices of the National Research Council. Here geologists and archaeologists discussed with officials of railroads and construction companies a plan through which the workmen on commercial excavation and construction jobs could act as spotters of buried evidences of pre-glacial man.

The report of the chairman, Dr. Madison Bentley, emphasized the part which the amateur has played in other countries. "On the other continents our surer knowledge has largely come by way of those who disturb the earth and the rocks, excavating for the purposes of modern man, for highways and railroads, for building materials and power plants. It is sometimes said that in western Europe every person is an amateur archaeologist, keeping an alert eye open for fossil bones and the buried works of ancient man. Although this statement is an obvious exaggeration, it suggests a clear advantage to other countries, where the early history of man and of

*January 22, 1939.

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other forms of life have long been matters of common and popular interest.”*

One local discovery illustrates the part the amateur can play in locating prehistoric remains. A shipwright whose education did not extend beyond high school but who had inherited the hobby of fossil collecting from his father, discovered many fossil fishes near Cleveland. But mere discovery did not satisfy him. After a long period of study under the guidance of the Cleveland Museum of Natural History, he was able to piece together the broken fragments and assemble the specimens which are now in the Museum.

One of the means by which geologists gain knowledge of what lies beneath the earth's surface is thorough examination of the samples of earth and rock at different depths when a well is dug. Often it is impossible for the professional to be on the spot at the right time. A trained amateur can do the preliminary work about as well as the professional. One geological hobbyist in the Cleveland region has by this method made a thorough study for years of the structure of the Grand River valley. The fact that his potential monograph on the subject remains unpublished and largely unwritten offers a commentary on the waste of amateur scholarship. With the proper encouragement and direction this man could add his quota to the sum of geological knowledge. Another man's

*Madison Bentley, *In Quest of Glacial Man* ("Reprint and Circular Series of the National Research Council," Number 100; Washington, 1931), p. 2.

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study of the pre-glacial Cuyahoga valley remains in the same state.

The village weather prophet has long been a traditional figure in the rural scene. There are jobs for amateurs in meteorology. In 1937 a climatology project was conducted by the United States Soil Conservation Service in twenty-three Ohio counties in the Muskingum Valley Watershed. Instruments for measuring rainfall and for determining other climatic conditions were provided by the Government, and a thorough plan coordinated the services of the men participating. This program utilized the services of five hundred volunteer observers, who took a total of from 20,000 to 44,000 readings daily. Some of the volunteers, such as orchardists and airport operators, had a utilitarian interest in these activities, but more than half of the five hundred took part "for the fun of it" or "because I'm interested in the weather" or "because I feel I'm part of a scientific experiment." This last motive is nothing but the research urge — in an elementary form, of course, but still decidedly worth cultivating.

In other of the physical sciences where this assembly-line subdivision of research activities is less feasible, the amateur must be content with some obscure, unexplored corner or must devote years of study to the mastery of a general field. Yet the layman continues to work under even these conditions. A music teacher in Akron, Ohio, without the background of college training, has gone into higher mathematics as a hobby. He has investigated the

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relation between art and mathematics, especially the creation of abstract designs from mathematical formulae. Now he is working on matrix residue systems. The Committee has been able to secure for him the continued advice and assistance of five specialists in three different universities. A professor at the University of Chicago, this amateur writes, "returned my ledger, sent me gratis an autographed copy of his monograph on matrices, and wrote me an illuminating letter which definitely settled a number of things important to me. Today I am writing a letter of thanks to him. I am grateful to you for this valuable assistance, which I believe could never have been obtained in any other way." The advanced leisure-time researcher needs this personal advice. At the same time he needs regular courses to make clear the relationship of his particular study to the broad field. Such formal instruction has been recommended to this man, but no courses attractive enough to catch his interest are available at suitable hours. Even without them he has progressed far enough to read a paper before a scholarly mathematics society.

The mathematics club for group research offers possibilities. The Committee was able to offer professional advice through Professor Moffatt G. Boyce to a group of young industrial engineers who wished to pursue a program of research in applied mathematics. Unfortunately the draft scattered the members of the club. As this report was being written a letter arrived from another young electrical engineer who desired to join

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just such a group. The present necessity for constant shifting of employment from city to city increases the need for agencies like the Committee.

A new factor appears when one examines the opportunities for the layman in chemistry and physics. Here there is added inducement for him in the omnipresent possibility of financial gain through the development of new industrial processes. In 1940 a Cleveland insurance salesman came to the Committee in search of assistance. For twenty years he had been conducting experiments in metallurgical chemistry in his basement laboratory, and he had finally worked out the first steps in a new method of reducing an important ore. However, he was entirely self-taught, except for a remote chemistry course in his undergraduate days, and unaided he could go no further in his research. Professor Frank Hovorka, the Committee's consultant in chemistry, helped him by directing his further study, with the result that in a few months he was able to complete his experiments so that the process was entirely satisfactory on a laboratory scale. It is of interest that he had known Professor Hovorka before but had hesitated to trouble him with a request for assistance until the establishment of a formal agency for bringing together the professional and the amateur.

Although the commercial development of a process or a device lies outside the realms of a university committee, the Committee on Private Research felt that it should keep in touch with its amateur until he became a professional by selling his process. Although competent

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chemists bear witness to the effectiveness of the process in the laboratory, there has been a complete failure in persuading any commercial company to finance a full-scale test. It is paradoxical that a process for speeding up the production and cutting the cost of a metal valuable in the war effort is held up because the people who should develop it are too busy running the old process at top speed. There is a need for an investigation of the problems of the amateur inventor. The National Inventors' Council is a good beginning.*

Chemistry and physics are among the most popular subjects, to judge by the number of applicants to the Committee for assistance. At the same time these subjects have probably seen the highest percentage of failure — failure on the part of the amateur to maintain interest in his research problem and push it through to a conclusion. The Committee's consultants in these fields have been generous with their time and their efforts to help; so the difficulty does not lie in a lack of encouragement for the layman. The subjects seem ill-adapted for amateur research; they provide interesting realms in which the hobbyist can study and amuse himself, but difficult ones for the discovery of important new facts. Perhaps further investigation will indicate new approaches. Radio, especially, with its great number of "hams" should have attractive possibilities.

In these fields, too, the crackpot is especially alive and flourishing. Strangely enough, no perpetual motion

*See *Time*, August 19, 1940, p. 20.

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machine has made an appearance; however, one man sent across the continent a manuscript setting forth a new theory of the composition of ether and a warning that scientists who are unaware of this theory may bring about at any moment the destruction of the entire solar system. The typical amateur, on the other hand, is like the young Cleveland factory worker who has spent \$1500 on a home laboratory and who is gradually gaining new knowledge and skills from his hobby.

As a stimulus the value of such an agency as the Committee can be illustrated by the case of a high school principal. He reported that an idea which he had toyed with fifteen years ago had remained undeveloped until he saw a newspaper notice of the Committee's activities. Merely because he had found someone interested in his ideas he resumed work and, with the help of Professor Cassius Curtis, the Committee's consultant in physics, produced an ingenious new type of safety device for the detection of dangerous gasses in mines. This same man, at the suggestion of the Committee, is now assisting a Viennese émigré, a business man, in experiments on a new type of therapeutic lamp. With the time of professional physicists at a premium now, two amateurs, with different but related skills, can often collaborate effectively.

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SOON AFTER the Committee hung out its shingle it became evident that there was great local interest in the American Indian; as was its practice, the Committee

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began to look about to try to coordinate this scattered activity. Leading American archaeologists, when asked for advice, were emphatic in their insistence that archaeology is no field for the amateur, that he does more harm than good. cursory investigation of the local activity seemed to indicate that this was true. In a subject like history the layman can amuse himself harmlessly; even if he gets nowhere in his research efforts, he destroys nothing. In archaeology, on the other hand, once an Indian burial or village site is excavated, its scientific value is almost entirely obliterated. Its story can be told only through the careful recording by trained scholars of the exact location of every artifact, every scrap of bone, pottery, or stone in the ground. The relic collector, concerned only with digging and accumulating arrowheads, tears up, as it were, after a hasty glance, a page from an irreplaceable and unique manuscript.

The problem is especially acute in the Western Reserve, once occupied by the Eries, a tribe of mystery, wiped out after a great battle with the Iroquois in 1654. Their history still remains hidden in the ground, for, as one historian has said, "No white man ever saw an Erie, alive and free." Although the region is rich in sites, it still awaits thorough scientific exploration, for the professional archaeologists in Ohio have been chiefly concerned with the more spectacular remains of the Mound Builder cultures in the southern part of the state. Through the thoughtless vandalism of relic hunters, there is grave danger that the archaeological source

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material on the Eries will be seriously damaged before it can be scientifically surveyed.

Faced with the situation of widespread amateur interest in a subject, coupled with much activity of the wrong kind, the Committee began its study. The first step was an attempt to evaluate the knowledge of archaeological techniques possessed by the best of the laymen. Experts who passed judgment on samples of their work pointed out that it had little real value. What, then, could be done with the amateur archaeologist? How could this misapplied interest be channeled properly?

The problem was complicated by the fact that there was available to the Committee in Cleveland no archaeologist specializing in American Indian excavation. However, Professor W. E. Lawrence, of the Department of Sociology of Western Reserve University, had received thorough training in general anthropological methods, and his generous application of time and thought to the problem resulted in a new approach.

If the landowner can be reached and convinced of the real value of the sites on his property, many of them can be saved. In order to cover the region thoroughly and to approach the landowner as tactfully as possible, the Committee set up the Archaeological Conservation Program, calling for the establishing of a network of local committees composed of persons of weight in the various communities who have a sincere interest in the American Indian. These committees are to make personal approaches to landowners and to urge conservation, to

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report sites accidentally uncovered through building operations and in immediate danger of destruction, to map known sites in their areas and safeguard them, and in general to see that as much destruction as possible be stopped. The local committees also are to provide gradually for careful excavation under competent professional supervision. All of these committees are to report to and receive advice from a central office. Thus, amateur interest can be diverted from thoughtless destruction to the careful conservation and exploration of an American heritage.

The plan is not faultless. The collectors who sell artifacts for profit are difficult to restrain. Although most landowners are public-spirited enough to see the position of the scientist, some cannot resist bribes offered by a few collectors for exclusive rights to dig. It is not easy to find the proper personnel for the local committees. But in spite of these weaknesses, the Archaeological Conservation Program seems to offer the best solution to a difficult problem.

Different phases of the plan have been put into practice. To see whether farmers actually did know the location of Indian sites, the Committee set up a booth with exhibits to attract attention at a community festival in a small Ohio town and talked with people who stopped to look. In two days more than a score of sites were located on maps.

Two local committees have been set up against different types of background, one at Oberlin College, the other in a county historical society. Through the efforts

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of one committee the owners of land on which lies an extensive fortification have promised permanent preservation of the site; the other committee has through the weight of its influence secured another large site which had already seen much depredation.

Among scientists the approval of the program has been widespread. Professor Lawrence's paper on the subject at the last meeting of the Ohio Academy of Science was received with enthusiasm. The Ohio State Museum has joined the Committee in sponsoring the program, and that institution has shared in the publication of a leaflet on archaeological conservation which is being distributed throughout the state.

All of this work of conservation looks forward to actual excavation. For the layman this is the most fascinating phase of the subject, and when he is supervised by experts he is competent to do actual digging. In a recent expedition near Cleveland the Ohio State Museum used Boy Scouts as volunteer diggers. One amateur during his summer vacation made a preliminary survey of a northern Ohio county, using surface evidence, local histories, and information gained from questioning those living in the county. This man, last year a city milk inspector, has now gone on to do full-time graduate work in archaeology. Too often, however, the amateur attempts a task for which he is not qualified. One garage man near Cleveland, motivated only by the amateur spirit, has dug widely and has recently published at his own expense a book on the Indian. Unfortunately the

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book has little scientific value. The waste of honest effort as well as of irreplaceable sites could have been prevented had he been directed into the proper channels years ago. The Ohio State Museum has just organized the Ohio Indian Relic Collectors' Society for those collectors who need guidance. It is being demonstrated that the layman can, after all, play a constructive part in archaeology when he is given proper direction.

In all the branches of scholarly inquiry the exceptional amateur can and occasionally does master a whole subject and produce results that are professional in quality. One man in Cleveland, an executive in a steel corporation, has made an international reputation in primitive archaeology. His conclusions as to the locale of the earliest use of iron in Europe, published in the *American Journal of Archaeology*, combine the unorthodox and unbiased attitude of the amateur and the sound scholarship of the professional. By subjecting specimens of early iron work to the tests of the modern metallurgical laboratory he has extended the knowledge of primitive methods of smelting. That museums all over the world have sent him valuable artifacts to be analyzed, even though the process destroys their value as museum specimens, is testimony enough of his standing. He has sought from the Committee advice on methods of publishing the monograph which he is now writing, for even the advanced amateur usually needs assistance in some phase of his work. Many other people in the Cleveland region are interested in European and Oriental archaeology. A center for their activities is

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provided by the Cleveland Society of the American Institute of Archaeology.

Political science evidently lacks the popular appeal of archaeology. The Committee has discovered in Cleveland no laymen producing satisfactory work in political science. Although the crackerbox philosopher spouting opinions in government and politics is an American institution, scholarly research in political science apparently demands a more rigorous method than the amateur is now willing to master. The long paper on international affairs which one Cleveland real estate man brought to the Committee for suggestions may be taken as typical of all the non-professional work in this general subject which has appeared. Although it was timely and rather well organized, the professors to whom it was submitted found it unacceptable as research because its conclusions were not based on sound evidence and were distorted by the author's own opinions. To convince the writer of these faults proved impossible. The special study of local government should offer great possibilities to the layman scholar, but until he receives encouragement, the outlet for his interest in government will be limited to active participation in politics.

The same general conditions exist in economics. Few amateurs are interested in the many promising local problems presenting themselves — the direction and form of Cleveland investments, the character of the Cleveland labor supply, and the features of local consumption in their interaction with technological de-

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velopment and public policy. In one phase of economics, however, the study and interpretation of business history, there is increasing activity. Many business men are aiding in the study of business history through the preservation of their old records; these men constitute a potential body of amateur scholars.

Psychology is a subject of great popular appeal, although its potentialities for amateur research remain largely unexplored. Numbers of laymen have participated in such projects as the experiments in extra-sensory perception conducted by Professor J. B. Rhine of Duke University. If such a project is carefully planned, the amateur can be of real assistance to the professional in the collection of data. Programs which have been suggested to the Committee include studies on child development (probably practical for a women's club); in comparative psychology, such as animal behavior; in dream analysis; in the methods of learning, especially applied to such skills as golf; and in propaganda analysis. Of course, in all of these, professional direction is probably necessary, and the individual amateur would play a minor role; yet they offer stimulus for further non-professional work. Only one advanced amateur researcher in psychology has sought out the Committee. A Cleveland pharmacist has nearly completed a book on the psychology of humor, applying fundamental principles to an analysis of contemporary humorous writing.

While sociology is characterized by the same indefiniteness of subject matter, its scope is so vast that it

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offers great possibilities for amateur participation. The Committee asked Dr. Clarence Schettler, of the Department of Sociology of Western Reserve University, to suggest subjects on which the layman could work with profit. Dr. Schettler's preliminary outline covers ten closely-typed pages and includes fifty-five definite projects on which the amateur can probably work with profit. Dr. Schettler summarizes the types of aid which the layman can offer:

The private research worker can aid the professional sociologist in two outstanding ways. First, he can gather the raw data into frames of reference that have been previously outlined for him. This might involve the enumeration of a particular item; collecting answers to a distributed questionnaire; investigating documents for the discovery of certain social characteristics; assembling references on a selected topic; collecting life histories that have been written after a suggested outline; contributing personal experiences that bear upon a special project; abstracting articles and books that will provide a preliminary insight into the advisability of further pursuing research on that topic; writing short articles on his unique experiences which might suggest interesting hypotheses that can be tested by further research; collecting newspaper and magazine clippings and pamphlets that relate to a special interest. Secondly, the private research worker can aid in the completion of research problems. He might construct graphs that give a compact visual picture of a vast amount of statistical data; make population pyramids of census tracts on demographic studies; locate pictures that illustrate theoretical

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findings; depict the main findings by way of spot maps; index the written study; make models and exhibits illustrative of conclusions; proof-read the finished material with the purpose of getting the professionalist to revise his statements until they have sufficient clarity to be understood by the lay person; and lastly, propagate the prestige of the discipline by manifesting an interest in it.

Such suggestions have mere armchair validity; one of the untested plans of the Committee was the initiation of rather elaborate group studies in sociology. Cleveland, with its large foreign populations, is an ideal place for investigation of the multiple problems growing out of immigration. It seems possible to interest such organizations as the Common Council for American Unity in cooperative research projects on various phases of the life of specific nationality groups. Such projects require, of course, careful professional supervision; the layman wishes to jump immediately into the writing of comprehensive histories before the proper spade work is done. Another danger arises from the natural patriotic bias of the volunteer researchers.

Individual amateur scholars are doing excellent work in sociology in Cleveland. One retired schoolteacher has published several articles on phases of the history of the Slavic groups in the city, and a librarian is writing a history of Czech life here. The layman can often achieve results that are impossible to the professional in working with minority groups. The professor, known to be collecting material for a book, is welcomed and is

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given information, but he remains under suspicion and he frequently cannot get the full story. On the other hand, the amateur who enjoys the confidence of the people, especially if he is one of them and knows the language, does not have to fight this constant suspicion. One Cleveland business man has for years made a hobby of observing and studying the nationality groups. Having completely won their confidence, he is accepted and he knows the history of certain movements as does no other outsider. The Committee called him to the attention of sociologists and under their direction he has been writing an article for publication. His broad knowledge of the minority press has already been utilized by at least one governmental agency.

A related amateur interest is criminology. A Cleveland lawyer has received guidance through the Committee on his research on the criminal responsibility of the mentally deficient. Another amateur is working on a similar subject. In spite of this varied activity, the great possibilities of amateur research in sociology still remain largely uninvestigated.

Of all the subjects of amateur interest examined by the Committee, history has apparently more followers than any other. The amateur antiquarian has been a familiar figure in England and, to a less extent, in America. The Committee soon discovered that in the Cleveland area there were many people engaged in the study of local history but that their efforts were not coordinated. The local historical society has devoted itself in recent years

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to the collection and preservation of a great library rather than to the stimulation of research. To fill this need the Committee founded the Historic Roads and Sites Association, an informal group of about 150 laymen interested in the study of local history.

This association has carried on an active program. At monthly meetings during the winter amateur scholars have read papers growing out of their research. The most recent talk, delivered by a retired newspaperman, described research which established definitely the route of Mad Anthony Wayne on his return from his western campaign. A series of tours to nearby historic sites was conducted last summer and attracted widespread attention. Amateur historians gave accounts of the historical background of the various spots visited. For example, one tour was based on events in the life of President James A. Garfield. At the site of the president's birthplace a county recorder talked on Garfield's parents and background; at the Ohio Canal an engineer discussed Garfield's boyhood connections with the canal; at Hiram College a professor described Garfield's days at that college, first as student and later as president; at one of the places where Garfield preached a minister told of his religious life; at Garfield's last home a publicity man analyzed his political career; at his tomb his son, an architect, related memories of his family life. These meetings and tours have offered an outlet for the work of the amateur historian and have stimulated further work.

One object which the Committee had in view in set-

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ting up the Historic Roads and Sites Association was a test of the possibilities of group research in local history. As an experiment the Association started a program to collect material on the history of early taverns in the Western Reserve, a subject of popular interest and one which the amateur could easily handle. Although many amateur historians consented to enlistment in this project, few completed assignments were turned in. One reason for the failure of the experiment was that most of the members of the Historic Roads and Sites Association already had their own individual research problems under way. Moreover, it is difficult to induce an amateur historian to leave his own pet study. This lack of success on one attempt does not mean that laymen cannot take part in group projects in local history. The success of the three projects of a historical nature already mentioned* indicates that such programs are more successful for groups of beginners whose interests have not already crystallized or when broad activities can be planned to include the specialized interests of advanced amateurs. An exceptional instance of the participation of beginners — high school students — in group historical research resulted in a complete story of a town's development. An English teacher in Wadsworth, Ohio, a former student of Professor Binkley, aroused the interest of her class in local history. The product of their enthusiasm was a thoroughly acceptable history, "Wadsworth: Center to City," planned, written, illustrated, published, and sold by the students of her class.

*See pages 36 to 41.

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By bringing together these laymen for the exchange of information and enthusiasm the Committee has stimulated them to pursue their own special interests. A city tax assessor has studied Ohio Indian trails for forty years. Using manuscript land records, the accounts of early travelers, etc., he has located with great accuracy the important trails which were the pathways of the earliest travelers. Another man, an artist, has worked on the same subject and has published a book in popular style. He has also made a complete series of large-scale water-color maps showing the trails and contours in perspective. A consulting engineer has studied and plotted for years the exact routes of early expeditions through the western country. Another engineer has located and collected data on hundreds of old taverns. Two professional photographers have recorded in text and picture the colorful history of the Ohio Canal. A doctor and a housewife have independently studied the communistic settlement at Zoar, Ohio, one of the longest lived of the nineteenth century Utopian experiments which were so common in America, and each has written a book on the subject. Unaware of each other's work until the Committee brought them together, they have now divided the subject to avoid duplication of effort.

A majority of the amateurs have approached the study of local history through an interest in places rather than in people or events. To many professional workers this seems the wrong kind of antiquarianism; one of the problems which must be solved is that of broadening the

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background of the layman historian to teach him how to relate local history to the larger scene.

Many other amateurs are interested in biography. Two schoolteachers are collaborating on a biography of Moses Cleaveland. A judge has just completed a life of John Tyler — a subject which he selected for an unusual reason. Having decided to undertake a problem of historical research in order to keep his interests related to those of his son, a graduate student in history, he selected John Tyler as the most misunderstood American president. As a lawyer he had defended the underdog, and as an amateur scholar he wished to do the same thing. What began as a pastime grew into a full-dress biography. Daniel Boone is the subject of another biography being written by a housewife. Biographical studies of phases of Lincoln's career and reputation have been written and published by a metallurgist and by an army private.

Especially in local history the amateur needs help in the publication of his findings. Unless some form of publication is achieved, even if it be only through type-written carbon copies bound and deposited in libraries, the results of the amateur's work, which may often contain just the bits of information the professional historian needs, will be lost. Unless the leisure-time researcher can see the result of his efforts he naturally loses interest. Because of the local nature of the material, commercial publication is often impractical. The various "near-print" processes of reproduction offer one solution. As an experiment the Committee arranged for a ninety-

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three-year-old Cleveland amateur, a former banker, the subscription publication of a little history of the Cuyahoga River. Issued entirely without subsidy, this book actually brought a profit to the author. Other local historians have received through the Committee professional advice and guidance in connection with the publication of their manuscripts.

The attention of the academic historians is being turned to the possibilities of amateur group research. The recent organization of the American Association for State and Local History seems to be stimulating such activity. The North Carolina Society of County Historians has just been formed to coordinate amateur effort in that state. At the last meeting of the American Historical Association, the whole subject came up for attention. To quote from Professor William Sachse's resume of the program:

A considerable interest was displayed in the study of local history. . . . Bayrd Still emphasized the superior character of cooperative research in local history and discussed how "the reservoir of potential researchers may be made available to the scholar who is willing to supply guidance and leadership" . . .

At the dinner of the Mississippi Valley Historical Association, Carl Sandburg admonished his audience not to get too far away from the people in interpreting both past and present, while Edward P. Alexander suggested that we study the history of "Mudville": the typical small American community. Here, where immigrants from many lands live peaceably as Americans, is

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democracy — and important social history — in the making. Here, under proper guidance, Mudvillians may receive moral and intellectual stimulation by discovering the individuality of their locality and by learning to appreciate its distinctive personality.*

Research in one field often leads the student to real achievement in an entirely different subject. One local historian, a brick manufacturer, felt the need of a mechanical method of copying text and maps from books. At the Committee's suggestion he investigated the possibilities of reflection copying, a process of photographing without the use of a lens. Finding no reasonably priced commercial device, he experimented until he had worked one out for himself. It was so practical that the *Journal of Documentary Reproduction* published his article describing its construction.

The weaknesses of the amateur scholar in local history are plain. He too often fails to see the relation of his own little problem to the broad course of national history. He is not discriminating enough in his choice of sources and he fails to document his conclusions properly. The cure for both of these faults is careful professional direction. If sufficiently attractive courses can be offered by adult education agencies, they may broaden his background and his knowledge of historical techniques.

*"Echoes from Chicago," *American Historical Review*, XLVII (April, 1942), 459.

CHAPTER III

THE IMPLICATIONS OF THE IDEA

THE ADVANTAGES OF AMATEURISM

THE word "amateur" itself indicates the most important thing about the layman scholar: he loves what he is doing. The later concept of the word, one who receives no pay, is only corollary to the first. He pursues learning for the love of learning, neither for academic advancement, as does his professorial counterpart, nor for a substantial salary, as does the scholar in the research divisions of industry. The result is that the true amateur, wherever you find him, always has one quality preeminently — enthusiasm for his subject. If the unwary listener fails to note the fanatical gleam in the eye of the amateur, he suffers the fate of Coleridge's Wedding Guest who "cannot choose but hear." The researcher describes gleefully the hardships he has overcome: how he walked barefooted for ten miles through the river-bottom mud in search of evidences of the pre-glacial Cuyahoga valley; how he searched newspaper records in many states before he could determine where Anthony Wayne spent the night of December 22, 1795; how, with the tenacity of a detective, he traced an early map from Ohio to a hog farm in Kansas. These are not idle fabrications; the Committee has played the role of the Wedding Guest.

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At times his very ignorance is an advantage to the amateur. The annals of science offer example after example of the foolish notion which turned out to be a major development; it is sufficient here to mention the names of Wright and Edison. Of course the amateur needs more than a hunch. To prove that his idea is practical he needs encouragement and help. The eagerness with which the Cleveland amateur welcomed the Committee on Private Research indicates that he does want guidance.

The layman researcher has no professional standing to jeopardize when his daring hypotheses fail. His mistakes usually cost nothing; he has lost little because he has little at stake. His time has been spent to no tangible end, but since it is *leisure* time he has the ample return of pleasure and relaxation.

Of the amateur's capacity to help the professional scholar there is no doubt. The individual volunteer, like the woman who is checking Cleveland newspaper files for the New York writer, can be of assistance in any kind of research that can be subdivided. In directed group research, however, lies the greatest possibility for amateur effort to achieve something important. Wherever the initial phase of a research problem is the making of many observations, the layman can be trained to act as the eyes of the scholar, whether he is tabulating weather conditions, reading for a dictionary, or counting birds. Certain fields seem to offer the most favorable opportunities for this kind of subdivision, among them being most of the natural sciences, linguistics, history, soci-

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ology, astronomy, and psychology. In many cases where it would be impossible to assemble enough academic scholars for a thorough survey, amateur volunteers can and will be of great service. The essential factor is competent professional direction.

The possibilities of cooperative research by high school students carried on under supervision are challenging. Through participation in simple activities the pupil can learn the fascination of digging up hidden truth, can form a taste for a productive hobby which will provide both pleasure and instruction for years. The connection with the recent development of progressive education is obvious. The Committee has had no opportunity to experiment with this phase of the amateur spirit, but it has noticed the number of high school students who are budding layman researchers, especially in natural history.

THE LIMITATIONS OF THE LAYMAN

THE FAULTS of most of the laymen with whom the Committee has worked have been surprisingly similar. Perhaps the amateur's greatest weakness is his failure to discriminate among sources. This appears most glaringly in historical research. If he sees something printed in a book, he assumes that it must be true, even if the book is a notoriously bad county history. He fails to evaluate oral testimony. The word of an old settler is accepted without qualification.

Akin to this fault is the layman scholar's failure to record his sources. He saves newspaper clippings with-

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out noting the paper or the date. He records supposed facts in his notes, and when he comes back to them he has no idea where he learned them. Footnotes are to him a waste of time, although he wants to see his work recognized by scholars. In short, the amateur, even when he has received a general academic education, too often has not learned the basic principles of research.

Another fault of the layman scholar is his narrowness, his failure to correlate his own especial interest with the whole field. Essayists in discussing from the sidelines the amateur spirit have made the statement that it produces a general culture in favorable contrast to the extreme specialization of the professional approach. This is a fine theory, but it falls down when one examines the amateur scholar in practice. The lover of literature who sits before his fire and reads the world's great books develops this broad culture, but seldom does he engage in research. The typical amateur researcher, on the other hand, has become fascinated by some special problem and drives on in pursuit of a solution, the borders of his own interest serving as effective blinders and preventing any side glances at the subject as a whole.

This specialization of interest on the part of the leisure-time researcher often makes it difficult to enroll him in group projects, even though they are in his own general field. As an experiment, the Committee made an attempt to interest the members of a club of advanced stamp collectors in writing a collaborative postal history of Ohio. They showed polite interest, but declined to go

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further because each was interested exclusively in his own subject and in writing about it. One specialized in stamps of the German states, another in those of the British Colonies, another in Civil War covers; all declined to be led away from their pet hobbies. The group research projects which succeed do so because their personnel is selected from beginners whose interests have not crystallized into fixed forms of activity or from advanced amateurs whose educational background has made them familiar with broad fields.

These are the essential weaknesses of the amateur scholar. They reflect the natural tendencies of anyone untrained in scholarly methods. And they are all subject to remedy. It is with the needs of the amateur in mind that the Committee makes certain recommendations.

WHAT THE AMATEUR SCHOLAR NEEDS

THE AMATEUR needs organized instruction. The remedy for his carelessness in documenting his findings would be careful instruction in research techniques. The difficulty lies in convincing the amateur that he should engage in study of this kind. He often needs training in expository writing and realizes his need, but a course in footnotes seems to him absurd. Furthermore, there is seldom a suitable course available. Even if the layman can arrange his working day to allow his presence at class meetings, he finds that the only course in, say, historical research is designed for graduate students in history and contains material for which he finds no need. The solution is a

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course designed especially for the amateur and given at hours to suit his convenience.

The narrowness of the advanced layman's field of vision calls for survey courses designed especially to meet the needs of the leisure-time student. Many standard college courses could be useful, but they must be made attractive to hold the attention of the amateur, who cares nothing for college credit, that great palliative of dull teaching.

In addition to formal instruction the amateur needs informal guidance and personal assistance. His problems are so specialized and his background so individual that the personal conference is essential. Chapter II has indicated his eagerness for this informal guidance.

Even more than this practical assistance the amateur needs the stimulation that comes from the knowledge that an institution of higher learning is interested in his efforts. Only yesterday a letter arrived from a woman who has been writing the history of a town. She says, "You have given me more real help in the few months I have known you than I received in the eight years I have been struggling with this story." The Committee does not intend boastfulness in quoting from this letter, for she received almost no concrete help. The point is that what she needed was merely a little advice and a lot of encouragement. The Committee on Private Research has been a trial balloon to see whether amateur scholars could be helped by such an agency. The response from the amateurs proves that they can.

WHAT THE AMATEUR SCHOLAR NEEDS

In particular the amateur needs the stimulation that comes from some kind of recognition. The Committee has watched him gain confidence after being asked to appear on a radio program or a lecture platform. Such recognition is occasional and uncertain. What he needs is a standardized and permanent reward for achievement. Publication, the thrill of seeing his work in print, might be a part of this reward. The beginning poet or novelist finds many contests which he can enter, the amateur scholar none. At the risk of being thought naïve, the Committee suggests that if a number of the leading scholarly journals in various fields would adopt a policy of reserving from time to time space for amateur contributions, the stimulus to amateur scholarship would be notable. Of course most journals today are not closed to amateurs as such, but it is too much to expect the amateur in his limited time to compete with the horde of professionals for publication space. In almost every division of scholarship there are a few outstanding laymen whose contribution is already recognized; it is the hesitant amateur with untried wings who needs this stimulus.

A system of regular awards would be practicable. This might take the form of an extension of the Olympic idea to include the products of amateur research. In each region something like the annual May Show of the Cleveland Museum of Art, with its system of judges and awards, would work.

Professor Binkley envisioned election of the dis-

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tinguished layman to honorary societies. Just as Franklin in the eighteenth century was honored by a fellowship in the Royal Society, the amateur of today would prize highly election to an Academy of Amateur Scholars.

There is no occasion here to discuss at length the many specific needs of the layman researcher. They are implicit in the case histories presented in Chapter II of this report. All of his needs can be embraced in the statement that there is a call for someone to foster amateur scholarship. There should be some agency in his local area to guide and assist him. If there could be a network of such agencies throughout the country, linked together through regional clearing houses, the benefits would be increased many times. The professional would know where to seek volunteer assistants in any specific locality. The formation of group research projects with observers covering a large area would be simple. Each amateur could know who else was working in his own field, and duplication of effort would be largely avoided. The establishing of systems of awards would be facilitated. And above all, the amateur would receive encouragement. This is a vision, but the amateur is no spectre. He awaits attention.

THE AMATEUR SCHOLAR AND THE AMERICAN COLLEGE

FROM WHAT source should this new agency to foster amateur scholarship spring? Museums, learned societies, and libraries can all help and their support is essential, but in each region there is only one type of institution

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that possesses the necessary personnel and prestige — the college or university. The academic institution can concern itself with layman scholarship in two ways: it can nourish and train the amateur spirit at the undergraduate level and it can act as godmother to the non-professional scholar outside the college walls, whether he holds a degree or not.

With the first of these responsibilities Professor Binkley was especially concerned in his original comprehensive memorandum.* He envisioned a deliberate effort to train college students for later amateur research, and to this end proposed an "Institute" to prepare faculty members for this task. This whole phase of the idea the Committee has not even approached. Its time has been more than occupied with the observation of the amateur scholar as he now exists.

The regular college course leading to the bachelor's degree has, to be sure, always been designed to stimulate further intellectual effort. How many commencement orators have told graduating classes that they are now on the threshold of the republic of letters, that their diplomas are the keys to true scholarship! And how many of those same graduates have gone out and settled down into a routine existence that embraced no intellectual life more stimulating than an escape movie or a Saturday evening bridge game!

This is certainly no place for an evaluation of American college education; it is being attacked and defended

*See quotation on pages 14-15.

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by doughtier combatants with sharper swords. But there is surely a need for a searching estimate of undergraduate studies with the specific purpose of ascertaining how they can stimulate the leisure-time pursuit of scholarship through a careful nourishing of the amateur spirit.

The Committee has demonstrated that a university faculty can offer individual guidance to the amateur scholar. Furthermore, faculty members apparently enjoy giving advice to laymen, so long as the whole program is systematized and the crackpot is turned aside by the central university clearing house. The professor is interested in minds at work; in the amateur he finds a type ever new and frequently stimulating. If the layman seeking assistance can be directed to the specialist best qualified to give it, the demand upon the time of the individual faculty member is negligible.

Another function which the university can perform is to offer courses for the layman scholars of the community. There are signs that this whole problem is already receiving attention. The tremendous popularity of the new short courses bearing no college credit, like those offered by the Junto in Philadelphia and by Cleveland College of Western Reserve University, promises well for the general idea. Dean Herbert Hunsaker of Cleveland College, with his broad experience in adult education movements, is rapidly working out plans for a new type of college work, designed for the intelligent citizen's leisure hours. If these plans can be put into

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operation, the amateur scholar will at last find a college classroom where the air is congenial and where he can earn his own type of reward.

If a college or a university is to be the intellectual center of its area, it must do more than sit back smugly and offer stereotyped training for future doctors or engineers or teachers. It must offer services aside from courses and credits and fees. If these same doctors, engineers, and teachers are to have an intellectual life apart from their professions, it is the college's duty to minister to their leisure-time pursuits. Many people want more than to read good books and to listen to informative lectures. Their interest is more easily stimulated by participation; they want to be producers as well as consumers of knowledge.

The mournful problem of financing inevitably raises its head. While it is within the province of a foundation to support an experiment like the Committee on Private Research, obviously a program which should be national in scope cannot be financed permanently by grants. Whatever the individual colleges do must be self-supporting. The Committee has carefully refrained from any mention of fees at this stage of the development of the idea, but the serious amateur seems to be willing to pay for the services which he receives. One way of financing a program would be a fee for membership in an organization of layman scholars which entitled one to certain privileges of instruction and advice.

Aside from such direct means of support, there are

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broader implications. A publicly sustained educational institution owes certain services to the taxpayers — a state university to the citizens of the state, a municipal university to those of the municipality. As the whole idea of amateur scholarship grows, it falls within the scope of public education. In the past the relations between lay research and the university have been vague. Prophecy is fatal, but one is tempted to say that this whole relationship will become more and more definite. There were no public libraries until there was increased democratization of reading. The democratization of scholarship is at hand.

The case of the fostering of amateur research by an endowed college is different, but aside from its implied duties as an educational institution, there is a reason why the idea merits attention. With the apparent decline of endowment incomes and of gifts from the very wealthy, such institutions must depend more and more upon an increased number of small gifts. The memories of college benefits remain green in the minds of some alumni; but if the college will continue to minister to the needs of all graduates, it will refresh their recollections. That the colleges are not unaware of this is indicated by the growing number of alumni institutes and short refresher courses for graduates. By helping amateur scholars the college wins friends outside alumni circles.

THE AMATEUR SPIRIT IN A DEMOCRACY

JUST AS THE life of a dictatorship depends upon the suppression and perversion of knowledge, so a democracy is

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posited upon the free and unregimented pursuit of truth. The way in which the Nazi administration has corralled professional scholarship and has muzzled the German universities is familiar to everyone. Even the movie-goer is stirred by the plight of the professor in *The Mortal Storm*. Less familiar but equally unpleasant is the manner in which the Hitler agents have realized the danger implicit in such amateur research as the collection of folk-songs by the German Youth Movement and have directed even such apparently innocent manifestations of the search for truth into Party channels. Independent research cannot tolerate dictatorship; one or the other must fall.

In 1937 Professor Binkley realized the importance to a democracy of the amateur spirit. In an address before the Minnesota Historical Society, he summarized the subject well.

Let me now emphasize again the importance in a democracy of a wide-spread understanding of the scientific method and the value of research. There is no other common ground upon which all citizens of a democracy can meet than that which is afforded by a common respect for truth and confidence in the procedures of investigation by which the truth is discovered. Science, even social science, has built up a great prestige value in the public mind, but beware! If the public is merely looking on from the outside at the quaint and interesting labors of our research men, then, even though it may defer to the conclusions reached by research, its deference will be unsubstantial. It will set up the professor

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against the business man, believing in the business man one day and in the professor the next. Such things as academic freedom will be for the public catch words, the real meaning and significance of which it does not understand. To protect democracy, we must protect the spirit of free inquiry for truth, we must broaden the number of people who participate in the inquest.*

Since this is true we are faced not only with an opportunity but with a responsibility as well. The fact that we are now engaged in a war for the preservation of the freedoms which support and are supported by research, makes the whole question of amateur scholarship no longer a purely academic problem. Aside from the many specific contributions, such as the value of local historical study to stimulate true patriotism by deepening the love for the traditions of every hill and valley, amateur scholarship typifies the very spirit of democracy.

Modern technological developments have added to the problem and the challenge by producing a new factor — the increase of leisure time. Although temporarily removed by the war, there is every indication that the problem will return with multiplied impact afterwards. With the growth of assembly-line methods in industry, the tasks of many workers no longer hold the challenge of fine craftsmanship. The man whose job consists of tightening a specified bolt over and over can hardly be expected to derive much stimulus from his

*"History for a Democracy," annual address of the Minnesota Historical Society, delivered January 18, 1937. Published in *Minnesota History*, XVIII (March, 1937), 1-27.

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daily work; his professional occupation is nothing but a means of earning a living.

Fortunately, such industrial methods have brought with them a shortening of working hours. The worker has more leisure time in which to cultivate intellectual and artistic pursuits. It is the duty of our society to see that he is provided with attractive opportunities to develop outside his working hours. There is reason to believe that he will use his leisure time profitably if suitable opportunities are provided. Dorothy Canfield Fisher in the recent general report of the American Youth Commission cites the work of the Committee on Private Research as an example and concludes:

There seems to be more than evidence; there is what looks like conclusive proof in support of the hopeful view that the compelling urge which is the motive power of the creative human being — artist or intellectual — is by no means restricted to the small number of men and women who have been so completely swayed by this urge as to shape their whole lives around it. By a marvelous correspondence of function, the acquiring and the practice of a skill have been not only the condition of survival of the human race but also its most enduring, most substantial joy and pleasure.*

Amateur scholarship is not the mere dabbling of a harmless eccentric. It is not the adroit victimizing of the layman by the professor to secure unpaid assistance in his

*American Youth Commission, *Youth and the Future* (Washington: American Council on Education, 1942), pp. 279-280.

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research. It is the spontaneous manifestation of a spirit which is of vital importance to the American way of life. Professor Howard Mumford Jones of Harvard emphasized its significance in a lecture sponsored by the Committee in Cleveland:

The spirit of cynicism cannot prevail in a classroom or in a country where a common respect for truth and confidence in the procedures of investigation by which truth is discovered, is widespread. One cannot be indifferent to values, careless of significance, or bored with meanings if he shares this common respect for truth, this common confidence in procedures of investigation. The magic theory of research fades away under this white light of common sense; the theory of unconditioned eccentricity appears for the romantic absurdity it is; and the divine futility of what passes for scholarship, like the aridity of mere antiquarianism, passes away as scholarship — which is nothing but the spirit of free inquiry — spreads among an increasing number of our citizens. In the present peril of the republic the apathy of many towards the future of the United States is not due to economic determinism learned in the college halls nor to historical scholarship; on the contrary the cure for this apathy, this indifference, this cynicism is a wider sharing of the spirit of free inquiry and a common respect for the truth.*

**Scholarship and Democratic Faith*, delivered March 10, 1941, in the McBride Lecture Series, Western Reserve University.



